The Builder.

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ILLUSTRATIONS.

Sedgwick Memorial Museum, Cambridge: Principal Entrance.....Mr. T. G. Jackson, R.A., Architect.
University College, Sheffield .....Messrs. Gibbs & Flockton, Architects.
Belgrave Hospital for Children, Kennington.....Mr. H. P. Adams, F.R.I.B.A., Architect.
"The Galtres," Easingwold.....Messrs. Demaine & Brierley, Architects.

Blocks in Text.

The Albany Site in 1792. (From Horwood's map of that date) ..... Page 480

Belgrave Hospital for Children, Kennington, Plan ..... Page 488

CONTENTS.

The Royal Academy Pictures 473
Radium and its Properties 475
Notes 476
Magazines and Reviews 478
The Albany, Piccadilly 480
The Royal Institute of British Architects 481
The Architectural Association 482
Engineering Societies 487
Architectural Societies 487
Competitions 487
Illustrations:—
Entrance to Sedgwick Museum, Cambridge..... 488
University College, Sheffield 488
Belgrave Hospital for Children, Kennington..... 488
"The Galtres," Easingwold, Yorkshire 488
Books Received..... 487
International Fire Exhibition 489
The London County Council 489
Applications under the 1894 Building Act 490
Books:—R. G. Blaine's "Some Quick and Easy Methods of Calculating"; R. W. Newland's "Ready Reckoner"; "Homeland Handbooks"; B. F. Cresswell's "Ancient and Loyal City of Exeter"; E. F. Strange's "Rood Screen of Ranworth Church"; "The Country Gentleman's Estate Book"; C. Jones' "The Business Man's County Court Guide"; Blackie's Standard Shilling Dictionary 491
Correspondence:—
Architecture and the Public..... 492
Saxon Remains in England 492
Cape Town University Buildings Competition 493
Correspondence:—
Wavertree Chapel Competition 493
City Clouds..... 493
General Building News 493
Foreign 494
Miscellaneous 494
Capital and Labour 496
Legal:—
St. Clement Danes Building Dispute 496
Point under Section 22 of the Public Health Act, 1875 496
Cases under the London Building Act 496
Polluting a River 497
Patents of the Week 497
Meetings 499
Some Recent Sales of Property 498

The Royal Academy Pictures.

THE Academy of this year contains no great painting—none which treats a great subject in the highest style, and which everyone competent to judge would select as the typical and central work of the year. And when this is the case there is always a certain feeling of disappointment. On the other hand, it must be said that, while there is no work of the highest order, the general level of paintings of the second order is higher than last year, perhaps higher than for some years back; and one cannot say, as an artist (not a painter!) remarked to us last year, "If it were not for Sargent, where would the show be?" That Mr. Sargent does not repeat his triumph of last year is a loss, but the loss does not leave the Academy so commonplace as it would have done in 1902.

One picture may however be named as the most brilliant success of the year, as the Academy seem to have recognised by hanging it in the centre of the second room—the position facing the entering spectators, which is traditionally assigned to "the picture of the year"—only the subject is not of a class to constitute it a great picture in the fullest sense. This is Mr. Hemy's sea-painting (89), perhaps the finest thing he has ever done, showing a small racing cutter closehauling for a run on the port tack, after rounding the buoy before a strong breeze with which her belated competitors are coming up in the rear. The sea is splendidly painted; and one can almost hear the rush and swish of the yacht as she buries her bow in the water. By a happy inspiration, instead of calling it by some such prosaic title as "Rounding the Buoy," the painter has entitled it "Youth," thus connecting the freshness and glory of wind and wave with the healthy enjoyment of the three vigorous young men on the craft, and giving a certain poetic and symbolic touch to the whole. In the painting of sea water the picture surpasses anything we remember to have seen, and quite converts us to what we called two or three years ago Mr. Hemy's "new manner," which proves to have been an effort after a greater truth of representation, now fully realised.

There is no other picture in the Academy so exciting and spirited, in its own way, as this, though of course a work in which figures are only a secondary element cannot be considered from the most serious point of view. Among those in which figures are the main subject we may distinguish between those which represent pure art, the aim at an ideal beauty in which meaning is a secondary consideration; those which are intended to illustrate a mental condition, a sentiment; and those (despised of the ultra-modern art-critic) which tell a story. Of the pure art pictures the two most important examples, by the President and Sir L. Alma-Tadema, face each other on opposite walls of the large room. Sir E. Poynter's is the completed and larger edition of his "Storm Nymphs" (160), of which it appears that the charming little picture of last year was only a preliminary study. The picture varies little from the study, but we observe that the foremost nymph no longer lies on the red drapery which coloured her side with rather heated reflections, but on the bare sand, and the change is a gain to the colour effect. The figure is a perfectly splendid piece of drawing and painting, especially considering its difficult position; the whole work is an example of painter's craftsmanship in the drawing of the figure, and as such it will always have its value, though it is not in any sense a poetic work. Sir L. Alma-Tadema, whose picture (in order to provide an effective centre-piece) has been moved from its usual position near the door, is a work of far more beauty of outer aspect—three delicately-draped Greek girls grouped around a marble basin looking at their "Silver Favourites" (203), with the "wine-dark sea" as a background; everything is charming in it—the colour of the draperies, the pose of the figures, even the foreshortened design of the marble seat end on the right; one of the numerous variations this artist has played on the same theme, which nevertheless do not seem to tire one. It is a more beautiful picture than the President's, more charm for the eye in it; of the two one would prefer to have it on one's wall, perhaps; but it has not the power of "Storm Nymphs," which would be a great picture if only there were a little more of intellectual interest in it.

This is the more apparent if we compare it with "The Sirens" (472) in Gallery VIII., practically the same subject, but in this case treated as a mere commonplace study of nude figures in graceful but conventional attitudes; a prettier picture than the President's, in the ordinary sense of the word, but without the power of drawing and construction which strikes one so much in the "Storm Nymphs." The Sirens is a subject so well worn that one can hardly have patience with it now unless it shows something more than mere academical nude studies such as these. Mr. Waterhouse's classic subjects, which come under the same category of *l'art pour l'art* pictures, fail to take us into the world of classic idealism in that they are mediæval, or perhaps we should say Early Renaissance, in feeling and suggestion. "Echo and Narcissus" (16) and "Psyche" (202)—Echo and Psyche are too obviously from the same model—have the charm both of colour and composition, but they want the great style which should surround classic legend; they are modern fantasies playing around antique themes; they have none of what one may call the remoteness of classic legend, and approach too much to the character of *genre* painting; pleasing always, however, in composition and colour. But the same painter's "Windflowers" (204), a girl walking in a breeze with her hair blown before her, is more truly poetic than his classic legend; it is one of those pictures which require no story, and no catalogue name; it is an artistic thought, whole and complete, making no profession but what it fulfils, and therefore more satisfying to the eye and mind than the painter's classic legends. It is a kind of work very puzzling to the ordinary exhibition-goer, who wants facts in a picture; but it will be a pleasure to all who regard painting as a means of poetic expression. Mr. Hacker's "Leaf Drift" (292) is more distinctly and obviously symbolic; two or three nude figures, half

hidden among blown heaps of fallen leaves; treated with a colouring which removes them from realism—a realistic treatment of the nude would have spoiled the whole thing—they are the symbols of the decayed life of Nature represented in the leaves. The colour is harmonious in effect, and the whole thing a successful fancy, for the suggestion of which, we imagine, the author was partly indebted to "Feuilles Mortes" in a recent Salon, we forget by what painter. We prefer the English picture; the fancy is less forced and the spirit more poetic. Among other works of pure art are Mr. Swan's "Iris" (64), a lightly-draped figure grouped among brightly coloured surroundings—flowers and birds flashing colour in the sunshine—not quite successful in its aim; and the same painter's little work "The Cascade" (115), a grouping of the nude figure with landscape, not with any idealised meaning; just the delight of colour, form, and texture; quite an artist's picture. We should notice also M. Bouguereau's life-size painting "Printemps" (150), a peasant walking with her child in her arms; academical, like all this artist's works; but it is a satisfaction to see the thing so thoroughly well done.

Among paintings which express a sentiment, or one may say a moral, the most prominent is that with which Mr. Wyllie, hitherto mainly known as a painter of sea and shipping, surprises us—"Peace Driving Away the Horrors of War" (55)—a kind of scenic painting with a moral. It is a landscape, one side sunlit and showing in the centre a little bright mediæval city girt with its wall in the midst of surrounding meadows, and arched over by a rainbow, the base of which, as usual, is brought too near to the spectator for truth of effect (painters will not leave their rainbows alone sufficiently), and on the left clouds, and groups of warriors, and in the middle distance—

> "The thick black clouds of smoke
> Go up from the conquered town."

If the effect is a trifle theatrical, the intention is evidently sincere, and the scenic setting well managed, and one may congratulate the painter on a success in a new class of subject. Another work which may be classed among those which express a sentiment is the rather striking picture by a painter new to us, Mr. Tom Mostyn, entitled "Unsolved" (383); a young woman who has laid aside the book that has puzzled her soul, and leans against the end of the sofa with a face of rather pathetic (perhaps also rather overcharged) melancholy and perplexity. The colour scheme is effective and broadly treated, and the picture is one that would lead one to expect to hear again of its author.

It may be questioned whether Mr. Collier's large picture, "The Prodigal Daughter" (427), should be grouped among pictures with a moral or pictures with an anecdote; we should say it combines both, though the moral is not one that will generally be apprehended in this country. This is the sort of picture which it is the fashion to say is not artistic; *i.e.*, it is not painted for beauty of line and colour; but it is a criticism of life, and that is one of the functions of painting. It has been said that the picture does not tell its story; we think it tells it very plainly. The "prodigal daughter," a young woman of powerful features and very over-dressed, has been driven to prodigalness through the impossibility of enduring any longer such a dull home and two such terrible old people, and turns with a last defiance before opening the door. There is both humour and a sort of tragedy in the picture; all the accompaniments of a hopelessly middle-class parlour are remorselessly made out; and the mother, who rises to rebuke the daughter, is a perfect type of the respectable, well-meaning, narrow-minded, religious parent of the middle class. Her large shadow cast upon the wall is a part of the symbolism of the composition. It is a very able and striking picture, and certainly one of the best things Mr. Collier has done; more is meant than meets the eye in it. In intellectual significance such a work is on a level far above Mr. Dendy Sadler's clever and brilliantly-painted "The Bride and Bridegroom" (679), which might be a very true representation of a wedding breakfast scene a hundred years ago, except in the fact that all the people, supposed to be gentlemen from their surroundings, are so hopelessly vulgar. One has only to be familiar with Jane Austen to know that the picture is not true; Mr. Sadler has got the costumes but not the personages of the time.

Among what may be called illustrative pictures Mr. Orchardson creates a scene in Sir Joshua's studio (201), with Mrs. Siddons giving a dramatic recitation in the interval of sitting for her portrait, of which the unfinished head is seen on the canvas. It shows the artist's usual mastery of colour and character, but Mrs. Siddons's figure is hardly equal in dignity to the idea given of her by contemporary portraits, and it is not one of Mr. Orchardson's greatest successes. Mr. Dollman may be congratulated on his carefully finished and very clever picture of "Mowgli made the Leader of the Bandar-log"; Mowgli's head is beautiful, and the tribe of monkeys are depicted with great spirit and humour.

There is a class of pictures which may be described as *choses vues*, things painted because they were seen; sometimes realistically, sometimes representing them not so much as they are, but as they impressed the artist. Among the latter a fine example is Mr. La Thangue's principal work, "Mowing Bracken" (324); simply a corner in the fields and a man with a billhook at work, and sunlight upon the ground; not painted with any realism, but interpreted in accordance with the painter's own style and the nature of the impression the scene made on him. Mr. John R. Reid's exceedingly brilliant and effective work "The Home Squadron" (329), in the same room, may be classed with these; it is not a landscape, it has not landscape character or composition, it is merely a view of a (probably) Cornish fishing village and its small harbour, translated into the artist's peculiar and powerful manner and touch; realism in the circumstances of the scene but not realism in texture. "The End of the Parish" (373), by Mr. Macarthur (another new name on the line we believe), is a *chose vue* in the strictest sense; not a landscape but a transfer, entirely realistic in aim, even down to the little incident of the sunlight shining through the cow's thin ear seen against it. Then there is the President's interesting picture of "The Bells of St. Mark's Campanile" (101), with their long wooden clappers, painted up in the bell-chamber; but are not the clappers too long? It would appear that the thickened portion of the clapper ought to strike on the sound-bow of the bell; in one swinging bell it appears to do so, but in the others, if they were swung, it would not. One can see no meaning in that thickening of the clapper unless that is the striking part; and if so, the representation is not quite accurate. Miss Catherine Wood has made a decided success with her two small still life studies, "A Study Table" (100) and "Stones and Crystals" (113); the latter especially.

Portraits this year are not so strong an element in the exhibition as they have sometimes been. Mr. Sargent does not present us with one of those remarkable portrait groups which have more than once formed the central object of interest at the Academy. He has two fine and energetic portraits of men, Mr. McCorquodale and Lord Cromer (453 and 458), and a very charming three-quarter-length of Lady Evelyn Cavendish (19), in which the accessories are indicated with his usual certainty and brilliancy of touch. In the same room there is a small-scale highly finished portrait of Lady Aird by Mr. Frank Dicksee (51), which deserves special attention as constituting a kind of practical protest against the broad but sometimes too unfinished painting of hands and face which characterises the work of Mr. Sargent and some of his imitators. There is a great amount of subsidiary detail, very carefully and conscientiously painted, perhaps a little too much so to leave full value to the figure, but the noticeable point is the care and delicacy with which the hands are painted. We have lately too often seen hands carelessly and roughly painted in portraits that are otherwise of great force and brilliancy; and the hand is worth more attention than this. In every respect the work is one of the best that Mr. Dicksee has painted. Mr. Ralph Peacock exhibits a very charming three-quarter-length of a young lady (357), a simple and unaffected work of great refinement; and Mr. Brock, a very young artist (the son of the eminent sculptor), gives great promise for the future in his admirable portrait of Mr. Aston Webb (328), an excellent likeness painted in a broad and artistic manner. "Breadth" is perhaps rather overdone in Mr. Herkomer's portrait of General Baden-Powell (491), which strikes one as a huge sketch rather than a picture, but very vigorous and characteristic. Near this is a half-length portrait of a young lady (487) by Mr. Eastman which ought certainly to make a reputation for the artist; he has been fortunate in his subject, a beautiful girl; but the picture is notable not only for the beauty of the countenance but for the fine and individual feeling for colour and style which it presents; it is certainly, from the artistic point of view, one of the most interesting portrait works of the year. We may class among portraits also, though it is not so catalogued, Mr. Furse's large and powerful work "The Return from the Ride" (471), a life-size painting of a man on horseback whose wife has come out to meet him in a sumptuous dress not adapted for a country ramble; but this one must accept—the dress was wanted for pictorial effect, and has its full value in that respect, and the work as a whole is a remarkable one, and justifies its large scale, which is such as one sees more often at the Salon than at the Academy.

Landscape is no more the strong point of the Academy than it generally has been of late years. Mr. David Murray's works are more like "transcripts of nature" than landscape art; they all seem to want "pulling to-

gether," and in entitling one of them "In the Country of Constable" (140) he suggests a comparison hardly to his own advantage. Among the few pictures which really represent what landscape art should be—the treatment of a scene as an artistic whole and with one predominating aim, the most successful works are Mr. Aumonier's "A Herefordshire Common" (413) and Sir E. Waterlow's "Crossing the Heath, Suffolk" (776). Mr. Alfred East seems still to be in search of a style in landscape; we notice three pictures of his each with a totally different manner and aim. Of these "Tintern" (249) seems a complete mistake—a landscape cut out rather than painted; "The Turn of the Road" (473) is cold and weak in colour; it is in "The Castle of Cœur de Lion" (761), as rich in colour as the other is weak, that the painter has found his best style, and he would do well to keep to and develop that, for here is a real piece of landscape art. Mr. Joseph Farquharson, though his snow picture "The Shortening Winter's Day" (174) is a little too much the kind of thing of which people say—"Looks as if you could walk into it," is a thorough success from that point of view; but this artist is remarkable in the present exhibition for having painted four landscapes of totally different classes of subject and effect, and succeeded in all of them; the finest is "The Struggling Moonbeam's Misty Light" (772), but all are good works; such an all-round success in landscape is very unusual and must, therefore, strengthen this artist's position materially. In Mr. G. F. Watts's curious work, "A Parasite" (153), most of the canvas is occupied by two vertical trunks of trees, the thicker one ivy-clad (which gives the name to the picture), while between them an undulating landscape contrasts with their straight lines. Though in a sense an odd picture, it is no common one, and is far removed from the naturalistic treatment of landscape; indeed, the ivy looks a little too much like bronze, but it is possible that a more natural treatment might have disturbed the unity of the work, which is a translation rather than a representation.

Mr. Somerscales exhibits another of his fine sea-pictures with a ship in full sail over a dark sea; as successful as most of his previous examples, but one finds a little too much, perhaps, of the same programme repeated. This and Mr. Hemy's splendid work are the only remarkable sea-paintings of the year; two large pictures of this class are hung on the line in Gallery VII., but Mr. Olsson's "The White Squall" (424) is no more than an average work, and the other picture (428) is bad; waves evolved out of the painter's inner consciousness, one would say.

We have only been concerned here with the important works and the general tendency of the picture portion (far too large in proportion) of the Academy exhibition. We may find space afterwards to call attention to less important paintings which are worth recognition, but which we have not space to notice at present.

SETTLEMENT OF THE SOUTHPORT PAINTERS DISPUTE.—This dispute has now been settled. The master painters have gained the point which they raised, namely, seven hours' work in winter, as the shops find convenient; while the men are glad to have revived the old half-mile boundary from the Town Hall.

RADIUM AND ITS PROPERTIES.

WE have already given some account of that remarkable substance radium (*ante*, p. 380), and the great interest attached to its properties tempts us to pursue the matter further. In the first place, we may give some particulars of the ores of uranium, from one of which, at least, radium has been obtained. It is highly probable that the majority of these ores will now be carefully examined with a view to ascertaining the presence of the element.

Commencing with the uranates, which for the most part may be included under one mineral, uraninite, we find that the latter is a uranate of uranyl, lead, usually thorium (or zirconium), often the metals of the lanthanum and yttrium groups; also containing the gases nitrogen, helium, and argon, in varying amounts up to 2·6 per cent. Calcium and water are also present in small quantities, whilst iron is a common impurity. Uraninite occurs either as a primary constituent of granitic rocks, or as a secondary mineral with ores of silver, lead, copper, &c. Under the latter condition it is found at several localities in Saxony, Bohemia, and Hungary. It also occurs in pegmatitic veins in Norway, and is abundant at many localities in the United States, especially in North Carolina, Colorado, and Dakota.

The minerals provisionally included as varieties under the name "uraninite" are as follow:—

Uranniobite, in crystals with a high specific gravity of from 9·0 to 9·7, found in granites; thoria is prominent, whilst lanthanum and yttrium are rare.

Broggerite, with a high percentage of oxygen.

Cleveite and nivenite contain still more oxygen, and are characterised by the possession of about 10 per cent. of the yttrium earths.

Pitchblende contains no thoria; the rare earths are also absent. Water is prominent, and the specific gravity (about 6·5) is lower than in the other varieties. This is the kind from which what little radium has yet been obtained has come. It occurs sparingly at three or four localities in Cornwall, also in Saxony, Bohemia, the United States, &c. The mineral is by no means as rare as is commonly supposed, though it is nowhere very abundant. Considering that a ton of pitchblende yields only a few grains of radium, however, large quantities of it, or some other allied ore, will be required even for investigations on a small scale.

Other uranates are gummite, including yttrogummite and thorogummite. Uranosphærite occurs in half-globular aggregated forms.

In the uranite group of minerals we have torbernite, a hydrous phosphate of uranium and copper, occasionally with arsenic, from a few localities in Cornwall, Saxony, and Bohemia; also zeunerite, which always contains a considerable proportion of arsenic. Another mineral of this group is autunite, or lime uranite with a composition of phosphorus pentoxide 15·5, uranium trioxide 62·7, lime 6·1, water 15·7. It commonly occurs in the same localities as uraninite. There are several other phosphates, arsenates, &c., belonging to this group, but they need not be specified, as all are of minor importance for our present purpose.

Two carbonates may be mentioned, namely, liebigite, a hydrous carbonate of uranium and calcium from Turkey and Saxony; and voglite, a hydrous carbonate of uranium, calcium, and copper, from Saxony.

Examples of niobates are samarskite from the Urals and United States, and annerodite from Norway. An example of a uranium silicate is uranophane, which is found in granite in Silesia.

Finally, we have johannite, a hydrous sulphate of uranium and copper from Bohemia; and uranopilite, the same plus calcium, from Saxony. Other sulphates of uranium, but of uncertain character, occur at Joachimsthal in Bohemia.

Many of these minerals are so uncommon as to be of little use so far as uranium is concerned, but it may be that a few will be found to have a greater content of radium than the pitchblende already operated upon.

Turning to radium itself, we have little to add to the summary of its properties given on a former occasion in these columns.

Dr. Johnstone Stoney wrote a paper on radio-active bodies as long ago as 1893, which was published by the Royal Dublin Society, and some particulars by the same investigator appeared in the *Philosophical Magazine* for April of that year. Sir William Crookes in his Presidential address to the British Association in 1898 also dealt with the subject. Speaking of the radio-active bodies then just discovered by M. and Mme. Curie, he drew attention to the large amount of energy locked up in molecular motions of quiescent air at ordinary pressure and temperature, which according to some calculations by Dr. Stoney amounts to about 140,000 foot pounds in each cubic yard of air. He conjectured that radio-active bodies of high atomic weight might draw upon this store of energy. He believed that it was not difficult so to modify this hypothesis as to reduce it to the level of an inflexible law, and thus bring it within the ken of a philosopher in search of a new tool. The atomic structure of radio-active bodies was such as to enable them to throw off the slow-moving molecules of the air with little exchange of energy, whilst the quick-moving missiles would be arrested, with their energy reduced and that of the target correspondingly increased. The energy thus gained by the radio-active body raises its temperature, whilst the surrounding air gets cooler.

Following up their discovery, M. and Mme. Curie found that the element radium possesses the property of continuously emitting heat, without combustion, without chemical change of any kind, and without any change in its molecular structure. It is doubtful, we think, whether these various findings will stand the light of further investigation without being modified to a considerable extent. Of course, the French scientists mentioned have adopted the latest methods of research, and, so far as our present knowledge goes, they are unquestionably entitled to draw the inferences they have. But when we are dealing with the "infinitely little" we must be very cautious. We ought to think twice before announcing that a substance can be active and yet not waste in any way; and we should be more cautious still before announcing that there can be any manifestation of energy without some molecular change taking place in the body which manifests it.

Even if we admit that radio-active bodies derive their energy from the air, and are thus fed, so to speak, by the atmosphere, it is difficult to believe that the process of assimilation is not accompanied by some change in molecular structure. The fact is that we do not yet know what a molecule is. We cannot see it by any process yet invented; we cannot, therefore, watch its movements; and, truth to tell, we know very little about it, though we speak glibly enough of it. We have a theoretical conception of what it is; we know that we must conjure its existence to account for the vast majority of chemical and physical phenomena around us, but that is about the extent of our knowledge of it. If we knew what caused chemical reactions, and if the microscope could enable us to look more closely into these mysteries, we might find that many of the extraordinary phenomena accredited to radium and its compounds may be explained by what we know is already going on around us on a larger scale.

We have no intention of belittling the discoveries of M. and Mme. Curie, however. It seems clear that radium has come to stay, and that many difficulties at present experienced by the chemist and physicist will disappear when it is better understood. In the meantime it is highly desirable that more of the material should be found, as eager investigators are without the means of carrying out their work in consequence of its rarity.

Radium has excited great interest by its power of throwing off rays, vibrations, emanations, &c., which, when received upon a sensitive screen of barium platinocyanide or zinc sulphide, cause it to glow with a phosphorescent light. As has been well said, we find in radium, apparently, a substance having the power to gather up and convert into heat some form of ambient energy with which we are not yet acquainted. Other substances, mostly of high atomic weight, possess its radiant properties to a less well-marked extent, and research may prove that transparency to the unknown form of energy is merely a question of degree. M. Becquerel gave a powerful initial impulse to the study of this subject by his discovery that uranium continuously emits some kind of rays or emanations capable of affecting sensitive plates. M. and Mme. Curie have estimated that radium is 500,000 times as powerful as uranium.

It is too early to estimate at its true value these discoveries of some of the properties of radium, but it seems quite clear that some forms of energy hitherto unknown to us have now come to light, and in the near future we may expect to find that radio-active bodies, derived not only from uranium compounds, but from other mineral sources, play an important part in many terrestrial phenomena.

NOTES.

Vauxhall Bridge.

THE new proposed design for Vauxhall Bridge is certainly an improvement on the dreadful thing hung in the L.C.C. Council Room a few months ago, in that the Brobdingnagian quatrefoils, &c., in the steel-work have been got rid of, and the spandrels are treated in a manner which seems, like some other points in the design, to be a reminiscence of the old bridge, which was a very good model to follow in this respect. The objectionable portions are, first, the iron projecting convex quadrant section below the balustrade, the meaning and structure of which are not quite comprehensible without a section, but which is just as bad and unarchitectural as the concave quadrant under the balustrade of the Grosvenor-road railway bridge; and secondly, the design of the pylons at one end of the bridge. The introduction of pylons would add to the dignity of the bridge, if they were fine architectural designs; but these are commonplace; and if one thinks of the beautiful pylons to the bridge at Paris, such designs as these can only be regarded as a significant example of the difference between English and French official architecture. The intention to continue the steelwork across the piers, using them merely as substructure supports, is questionable in a practical sense; at all events, the vibration which is set up by traffic on Westminster Bridge is no doubt owing to the continuity of the steel structure, by which the vibration in one bay is communicated to the others. Lamp standards (an important point) are not shown in the design. An effort has been made towards a better treatment of steel work, but the London County Council have not within their own body the artistic talent necessary to deal satisfactorily with work of this kind, and public pressure should be brought to bear upon them to do what they ought to have done long ago—to seek the best architectural talent of the day, outside their own official staff. They will not produce anything satisfactory until they do so.

Blackwell's Island Bridge, New York.

THE East River, separating Manhattan and Long Islands, is very much in evidence at the present time, and the various bridges built, and proposed to be built, across it are apt to be confused by all except those who have found time to keep exact mental records. It may, therefore, be convenient to make the following note:—Bridge No. 1 is the well-known Brooklyn Suspension Bridge; No. 2 is the nearly completed suspension bridge, recently damaged by fire, and officially designated the Williamsburg Bridge; No. 3, another suspension bridge in progress, and situated between No. 1 and No. 2, is named the Manhattan Bridge; and No. 4 is a cantilever structure about to be built across the river at Blackwell's Island. When completed, the Blackwell's Island Bridge will afford greater capacity for traffic than any long span bridge hitherto built, and, with one exception, it will be the longest truss ever constructed. It will have two decks, accommodating one roadway, two footpaths, and six railway tracks. The total length between anchorages is to be 3,714 ft. 6 in., including a span of 1,182 ft. over the main channel, a span of 984 ft. over the east channel, and two shore spans of 459 ft. and 469 ft. 6 in. respectively. Two intermediate piers are to be situated on the island, two more intermediate and two anchorage piers being designed to stand on opposite sides of the river. These piers will rise to a height of 160 ft. above the ground level, and from them, at the level of 110 ft., steel towers, 300 ft. high, will rise to the total elevation of 410 ft. The total weight of steel in the structure is estimated at nearly 360,000 tons, and the cost of the bridge at about 2,500,000*l*. Plans were commenced in 1898, since when no fewer than eight engineers have been concerned, in one way or other, with the designs; and it is gratifying to record the fact that the architectural features of the work have been designed by an architect appointed by the Bridge Commission. We have repeatedly urged the necessity for such collaboration in connexion with the design of important bridges in this country. The services of an architect should not in any way tend to hamper the engineer in the development of his scheme, as they would merely be intended to afford needful help with such integral and auxiliary parts as are of purely architectural character, and so to enhance the effect of sound engineering design.

The Powers of Local Authorities.

IN the recent case of The Attorney-General *v.* The Mayor, &c., of Barnstaple, the decision of a point of general importance was frustrated by the technical form of the pleadings. The Corporation had obtained powers under a Provisional Order of the Board of Trade to supply electric light within the borough. Acting, as they alleged, in pursuance of this power, they held themselves out to wire and supply private houses with electrical fittings. The plaintiffs, ratepayers in the borough, suing through the Attorney-General, applied to the Court for a declaration that this action on the part of the Corporation was *ultra vires*, and for an injunction restraining them from expending the ratepayers' money in such undertakings. At the trial the Corporation set up the right to supply private customers under the "general law of the land," but the Court ruled this defence not to be open to them under their pleadings, and the action was settled by the parties on the Corporation stating they did not in future intend to enter into any such contracts. It would appear, however, that when powers are granted to public bodies either by Parliament, or by Provisional Order by the Authority having delegated authority to grant such orders, any such general extension of such powers as that here contended for would be most inadvisable, and that such powers should be clearly defined and strictly construed, or, with the tendency exhibited by Local Authorities to magnify their office, considerable uncertainty will ensue.

A New Method of Gas Manufacture.

THE number of English towns in which carburetted water-gas is mixed with the coal-gas supplied to the general public is now so large that the practice of supplying a mixture of the two descriptions of gas may be regarded as general. Until recently, however, the carburetted water-gas has always been made by the Lowe process, which consists in passing water-gas hot from the generator into a red-hot carburettor, in which it mixes with vaporised oil, and the mixture then flows into a superheater in which it is converted into the mixture of permanent gases known as carburetted water-gas. At the Cleethorpes gasworks, near Grimsby, carburetted water-gas is now being made by gasifying oil in red-hot retorts (Peebles process) and at the same time passing into the retorts a stream of hot water-gas from a Dellwik generator. The water-gas mixes in the retorts with the oil-gas and produces carburetted water-gas, while a small quantity of coke of excellent quality is drawn from

the retorts at intervals of, say, twelve hours. According to Mr. E. J. Brockway, who has introduced this process, it is possible to accomplish with two gallons of oil the same degree of enrichment as is commonly effected by from 2½ to 3 gallons when the Lowe process is employed. Mr. Brockway also finds that whereas at Cleethorpes the cost of producing 16-candle coal gas is 15½d. per thousand cubic feet, the same volume of 16½-candle carburetted water-gas made with his new plant can be manufactured for less than 9¾d.—a reduction of 37 per cent.

Sunday Gas.

ON Monday last Mr. Justice Joyce decided that the gas examiners appointed by the London County Council are entitled to test gas at the official testing-places on Sundays. Several months ago the County Council instructed some of their relieving gas examiners to test the gas on Sundays at the London testing-places, and for some time past tests have been made in the districts supplied by the Gas Light and Coke Co. and the Commercial Gas Co. The South Metropolitan Gas Co., however, refused to allow the gas examiners to test in their district on Sundays, and claimed that the gas may be legally tested on weekdays only. The London County Council accordingly brought an action against the gas company, with the result that a decision in favour of the London County Council has been given. The price charged for gas supplied on Sundays is the same as that charged for weekday gas, and it would be a strange anomaly if the official examiners were not permitted to make the same tests on Sundays as on weekdays. It would be equivalent to refusing to allow inspectors appointed under the Sale of Food and Drugs Act to take samples of milk for analysis on Sundays. The encouragement of Sunday labour is objectionable, but we understand that the Council have no intention of permanently adopting regular Sunday testing, and the gas consumers of South London may therefore congratulate themselves upon the successful issue of the Council's action.

Telephony in Cities.

THE paper by Mr. Aitken on "Divided Multiple Switchboards: an Efficient Telephone System for the World's Capitals," which was read to the Institution of Electrical Engineers last week, gives a possible solution of a difficulty which is sure to arise sooner or later in telephony in large cities. Substations cannot be multiplied indefinitely, as the loss of time in making connexion between two subscribers through substations increases, the greater their number. Mr. Aitken gets over the difficulty by making the subscribers do part of the connecting for themselves. He would form one huge central exchange in the city, which would serve an area of some 14 square miles. He would also have subsidiary exchanges at a distance of 3½ miles from the central. Every subscriber would have three keys which would make connexion with different boards in the same exchange depending on what number he wished to ring up. In the subsequent discussion most of the speakers seemed to think that the saving in the exchange plant effected by Mr. Aitken's system would be dearly purchased by the increased cost of the line plant. Mr. Webb said that the problem had been solved in New York by encouraging private branch exchanges. Every large hotel and practically all the large business houses had a telephone switchboard and a private operator of their own. They found that the improved service more than made up for the slightly increased cost. He thought also that Mr. Aitken had exaggerated the time required to make a connexion through an exchange. In New York the average time of making a direct connexion between two subscribers was twenty-three seconds, whilst through an exchange it only took seven seconds longer. Mr. Gavey welcomed the paper, but thought that it hardly came within the range of practical telephony. A few years ago an exchange of 6,000 was a maximum, now he had one being built with a capacity of 20,000. He considered that it was a retrograde step to leave any of the switching to the subscriber.

Ancient Mexican Ruins.

FROM recent reports it appears that the ancient ruins at Palenke, in the State of Chiapas, Mexico, are slowly, but surely succumbing to climatic influences, and to the persistent attacks of an overwhelming tropical vegetation. The climate is particularly humid, and, while conducing to the decay of the ruined stonework, it also encourages the rapid growth of vines and creeping plants, which are disintegrating the walls and pavements. The ruins consist of temples, pyramids, aqueducts, and other buildings whose purpose has not been discovered, there being nine distinct structures in all. Chief among the remains is the temple, including courts and balconies, and spacious corridors where numerous tablets in bas-relief are let into the walls. Another important building, generally known as the "palace," is situated on a mound over 300 ft. long, by 250 ft. wide, by 40 ft. high, the building itself being 238 ft. long by 180 ft. wide. The material used in the construction of these buildings was stone, many of the blocks being of enormous size, and all of them jointed with mortar. Various conjectures have been made as to the era to which we owe these remarkable ruins, some suggesting that they were built as recently as the seventh century, while others believe them to have been coeval with the pyramids of Egypt. Up to the present time the key to the hieroglyphics carved on hundreds of tablets remains undiscovered, so the world knows little or nothing of the origin and history of the race by whom the structures were built. Nothing seems to have been done hitherto for the preservation of these interesting monuments of a past and forgotten civilisation, but it is to be hoped that the Mexican Government may be speedily awakened to a sense of their duty to the world.

York House, Twickenham.

ON May 12, York House, Twickenham, will be offered for sale at the Mart, by directions of the Duc d'Orléans, who, it seems, has decided not to return to the neighbourhood. The property, formerly known as York Farm, was given, it is said, to Lord Clarendon by Charles II. upon the public announcement of the marriage of the Duke of York and Lady Anne Hyde. The main and older portion of the house, which has three floors, with two slightly projecting wings and gabled roofs, was a residence of James, Duke of York, and his daughters, Mary and Anne, were born there. It subsequently became the home of Laurence Hyde, Earl of Rochester, and of Dr. Cleaver, Archbishop of Dublin. The Honourable Mrs. Damer, the sculptress, bought York House in 1817, and occupied it until her death in 1828, bequeathing the property to Lady Johnston. The house, having been occupied during many years by the Comte de Paris, passed to Sir Mountstuart Grant-Duff, who sold it for 14,000*l.* to the Duc d'Aumale. The Duc d'Aumale presented the estate to his son, upon the occasion of the marriage of the latter. The house narrowly escaped from destruction by a fire in October, 1897, occasioned, as was conjectured, by the ignition of an oaken beam through the over-heating of a flue from a furnace in the basement, whilst the house was being extensively redecorated and repaired. No material change was then made in the main fabric, but the new works, carried out by Messrs. Leslie & Co., of Kensington, as general contractors, and Messrs. Rawlings Brothers, as engineers and electricians, included entirely new drainage and sanitary arrangements, an installation of electrical light for nearly 500 lamps, with motor fans for ventilation purposes, and fittings after the Louis XIV., XV., and XVI. styles; the ceilings were renewed in the Louis XV. style, with the exception of the early Elizabethan ceiling on the first floor, and the fine contemporary staircase is wholly preserved. The beautiful grounds, covering ten acres, are traversed by the high road which leads to the parish church, and from that spot is obtained one of the prettiest views of that part of the river; a bridge across the road affords access to the slip along the Thames side. Some while ago the Duc d'Orléans expressed his willingness to consent to a diversion of the road so as to form an embankment to the river and render his grounds entire, but the offer was declined by the Local Authorities as involving too great an outlay.

The Goupil Gallery.

AT the Goupil Gallery there is an exhibition of oil-paintings by Mr. J. Campbell Noble, R.S.A., under the title "A Journey through Holland." The Dutch school of painting is generally prominent in the Goupil Gallery exhibitions; and Mr. Noble's paintings, in spite of his name and nationality, are so decisively of the modern Dutch school as to suggest the question, did the artist select Holland on account of an innate tendency towards this school of painting, or did he acquire the style from contact with Dutch influence in regard to nature and art? His works, at all events, have the merits as well as the defects of the Dutch school; they have the grey and dull tone of Maris and other painters of the school, combined with a perception of composition in landscape and a power over broad and striking effects of sky and cloud, in which he has in some instances even surpassed his models. Take as examples "Breezy Weather" (20); "Dordrecht" (27); "Mid-day" (28); "Saw Mill on the Nord Dyke" (29); all of which are admirable. There is a certain degree of monotony in the subjects and treatment, in the exhibition, taking it as a whole; but it is fine work in a broad and free style, and pervaded by a thoroughly artistic spirit.

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The Dutch Gallery.

AT Mr. Van Wisselingh's Gallery, Brook-street, there is a collection of drawings and etchings by M. Legros on view—a rather depressing collection as far as the etchings are concerned. M. Legros, like Mr. Strang, has a leaning towards morbid and repulsive subjects in etching, and in this case it is not sufficient to have a complete series on the subject of the "Triomphe de la Mort," but we must have various repetitions of the most forbidding of these in other "states." The triumph of death may certainly be treated in art so as to convey noble and solemn ideas, but M. Legros gives us only the grotesque and the horrible. Some of the water-colour drawings — pencil sketches washed in monochrome, are fine compositions in a slight manner; such for instance as "Une Ferme" (31); and the portrait heads in pencil are—in the fashionable phrase—"quite good." But the general effect of the exhibition is not exhilarating.

Sketches of the Indian Durbar.

THE collection of sketches made during the recent great Durbar by Mr. L. Raven-Hill and Mr. Inglis Sheldon-Williams, on view at the Fine Art Society's Gallery, may be said to be the art of the illustrated journal rather than the art-gallery, but as such it is very clever and interesting, and represents a great deal of what may be called almost impromptu work, since only the shortest time for sketches can have been available in most cases. Mr. Sheldon-Williams gives us water-colour sketches of the ceremonial scenes at the Durbar, with the elephants in gorgeous array and silver or gold bangles on their fore-feet; also some polo scenes, of which No. 43, with the horse and rider rushing to the front, foreshortened, is a remarkably successful and spirited representation of momentary action. But Mr. Raven-Hill's pencil sketches of individual types of native life are to our thinking the cleverest and most interesting portion of the collection. We may direct attention especially to the delightful sketch of the "Official Photographer at the Durbar" (41); also the specimen of "A Baluchi" (77), which in itself is enough to explain why frontier tribes are troublesome to deal with.

Drawings of Knole House.

MESSRS. GILLOWS' have on view in their rooms a set of nineteen water-colours of Knole House by Mr. C. Essenhigh Corke. The interiors, as a whole, are most charming colour studies of well-chosen bits in this delightful old house, marred by an unfortunate weakness in the handling of drapery and furniture. The most successful are the Venetian Bedroom and King James Bedroom. In the former the artist has conveyed all the rich harmony and historical charm of an old tapestried room, but most of the others are so timidly executed and have so missed the subtle elegance of the fine old furniture that it is only their invariable good colour which saves them from failure. The west front is the only exterior of any merit.

"Sculpture in England."

A LETTER on this subject in the *Times* a few days ago, signed by "A Lonely Londoner," is a curious example of right feeling in regard to sculpture combined with want of knowledge or recognition of facts. The writer seems to think that English sculpture is in a very bad way, and attributes this to want of public encouragement and to the niggard space and opportunity given to it by the Academy. As to the English indifference to the art, and the poor character of most of our public sculptural monuments, he is quite right; but the fact remains that, in spite of this, English sculpture has made immense progress during the last twenty years; it is now in a better state than any other of the arts as practised in this country; and in several recent years (we do not say in this one) the sculpture at the Royal Academy has been the strongest part of the exhibition, and has been admitted to be so by some at least of the painters themselves. The statement of "A Lonely Londoner" that foreign critics deny the existence of an English school of sculpture, "while they are the first to recognise a British school of painting," shows little acquaintance with French criticism at all events; for the precise criticism of French writers on art is that while there is "English painting," there is no "English school of painting." The suggestion that the Royal Academy might make an adequate space for the exhibition of sculpture by temporarily roofing the courtyard in front of Burlington House is totally unpractical; how are carriages to get to the doors in that case? and he forgets also that the courtyard is the only access to the doors of the various learned societies occupying the same building. What the Academy might do would be to devote the largest gallery to sculpture, instead of the more confined space of the Lecture-Room; but as long as painters are in such a numerical majority at the Academy, this will never be done except by pressure from without. In this respect a letter such as the one we have referred to may do good, by tending to arouse public opinion on the subject; but the writer, with the best intentions, is weak in his facts and unpractical in his suggestions.

MAGAZINES AND REVIEWS.

THE *Quarterly Review* appears to have fairly embarked on the system of signatures to articles, the present issue containing five signed articles. We think it is a mistake, and is giving up the high position of a *Review* which for so many years has relied on the quality of its articles and not on individual names. The system of signed articles is very well for popular magazines in which the principal interest consists in stories and light articles, but with reviews which deal in an argumentative manner with serious subjects, the inevitable result is that weight of an article is judged of, by the bulk of readers, not on its merits but by the degree of importance which they attach to the name at the foot of the article; and another result, which has certainly been apparent enough in the case of more than one of the leading monthly magazines, is that articles are accepted on special subjects from writers who have no real claim to speak on those subjects, but whose names, being for other reasons well known to the public, will assist in selling the magazine. In the case of the important article "Byzantium or Ravenna," in the *Quarterly*, there is no such complaint to be made, since it is signed by Mr. Reginald Blomfield; but the innate evidence of the article would have sufficed to give it weight with architectural readers. The title of the article has reference to the thesis of Signor Rivoira, who, in his work, "Le Origini della Architettura Lombarda," wishes to show that Ravenna was not an outcome of Byzantium, but a step in a direct Italian development with which Byzantine influence was not concerned, and in which the line of derivation can be traced completely, from Classic Roman work, on Italian soil. He seems to have twisted a good many architectura facts more or less to fit into this theory which we do not think is likely to find acceptance out of Italy. As Mr. Blomfield observes, the remains of Classic Roman architecture were the common property of the heirs of the Roman Empire; "what was not common property was the tradition of constructive skill which the Byzantines alone seem to have preserved;" and it is on account of this constructive skill that we are justified (as well as for other reasons) in attributing to Byzantine influence such buildings as those of which San Vitale is a type. "Signor Rivoira classifies San Vitale as Italian merely because it stands upon Italian soil." In the course of the argument we notice that Mr. Blomfield adheres to what we have always regarded as the true explanation of the Byzantine block on the top of the abacus; not that it was any reminiscence of the Roman slice of architrave above the capital, but that it originated in the necessity for packing up to a uniform springing level the capitals and columns looted from various older buildings, and not agreeing with each other in height. Signor Rivoira's argument from the style of execution of carved capitals, again, as the reviewer observes, is nullified by the fact that, at the period under consideration, nearly all builders in Italy "used any capital they could lay hands on for any column," and many of them may have been imported ready-made from Byzantium. The remainder of the article is occupied by an interesting historical and critical analysis of St. Sophia, accompanied by a plan and section, and a notice of Messrs. Schultz and Barnsley's monograph on the Monastery of St. Luke of Stiris. Messrs. Lethaby and Swainson's book is naturally the basis of the review of St. Sophia; and in a passing paragraph Mr. Blomfield disposes, with about the amount of respect it deserves, of the light-hearted theory of the influence of the "Comacine Masters" set up by a recent very amateur writer on architecture.

In the *Art Journal* Mr. Claude Phillips continues his article on "Great Portrait Sculpture Through the Ages." Among the illustrations that of the head of Niccolò da Uzzano, by Donatello, is truly remarkable for its extraordinary and almost startling individuality, typical, as Mr. Phillips says, "of the watchfulness, the unresting intellectuality of Florence": reminding one of the passage in Browning's "Luria"—

> "She's a contrivance to supply a type
> Of man, which men's deficiencies refuse."

One can understand how men with this sort of head could have made use of Luria as long as they needed him, and then condemned him to death, on a conventional charge, at the convenient moment.

> "The rather violent and realistic colouring, which is not in its entirety that of the original, causes some shock to the beholder on a first acquaintance, and he is thus made to feel how dangerous is too near an approach to nature, how impossible it is to compete with her on her own ground. Were it not for the over-mastering genius of Donatello, that here, in a perilous attempt, achieves victory over self set obstacles, we should be dangerously near the boundary line which divides the human from the monstrous."

"The Later Work of Elihu Vedder," by Mr. Lewis Lusk, deals with and illustrates the work of an artist who we have always thought has been over-rated on account of the poetic significance of his art, which is unquestionable, but is not fortified by high technical power or by the quality of style; it is the work of a gifted amateur rather than of an artist in the fullest acceptation.

In the *Magazine of Art* is an article written and illustrated by Mr. Raffles Davison on "The Recent Advance in Architecture." There has been an advance, but whether it is best illustrated by the class of rather over-picturesque houses which Mr. Davison selects we do not know. We are glad to see, however, that he recognises that "architecture is not the very impersonal affair that some would have us believe," that the architect's individuality will come out, and is an element of value; but individuality should not be forced beyond a certain point. Nearly all the exteriors chosen for illustration are of the picturesque irregular order; and however charming this may be in an ancient house, which has perhaps grown into that form through successive additions, or other accidental causes, the contrived picturesque is a false note. Architecture at its best, even in houses, is a severe and logical art. "An Inquiry into

some Armorial Pieces of Hispano-Romanesque Ware," by Mr. Van de Put of the South Kensington Museum, is a learned article on an interesting chapter in art-ware; not a literary essay, but a valuable summary of information, into which a great deal of study has gone. "Artistic Photography of To-day," considered especially in regard to the means of suggesting effects of colour and texture, is an article by Mr. Horsley Hinton, dealing with the work and method of Mr. F. Hollyer; other photographers of artistic work are to be considered in due course. The frontispiece is a very successful chromo-lithograph of Mr. Talbot Hughes' graceful little picture, "The Miniature."

The most important work illustrated in the *Architektonische Rundschau* is the new Bavarian National Museum at Munich, designed by Professor Gabriel von Seidl of that city. It is built on a rambling but picturesque plan, which lends itself well to architectural effect, and the exterior grouping is effective without being forced or eccentric. The style is a kind of very free Classic, which we do not admire very much in regard to detail, but the general architectural design should be a success, as far as can be judged from the illustrations. The two uncouth nightmare creations in decorative sculpture by Herr Waderé, of which illustrations are given—stunted centaurs of a Teutonic type with disproportionately large hoofs, which appear to be balustrade terminals, are rather sad examples. A short article is devoted to leather cutting decoration. There is nothing else for any special note in the issue, except a singular parti-coloured plate of a house in Kaiserslantern by Professor Halmhuber of Stuttgart, which may appear less funny in reality than it looks in the drawing; and also the fact that for once the *Rundschau* has recognised something beyond the confines of the Continent, by reprinting an illustration of an American house from one of the American architectural papers. That English architecture should be recognised as having any existence seems to be out of the question in this one-sided "round-show."

The *Berliner Architekturwelt* is entirely occupied with the works of one firm of Berlin architects, MM. Erdmann & Spindler; chiefly villas large and small, and their interior details, which latter are pervaded by a restlessness and eccentricity which must make them exasperating houses to live in, one would think; but we suppose there must be many people in Germany who delight in this kind of thing, or there would not be so much of it turned out. The exteriors, or some of them, are more restful in treatment; the perspective view of the Haus Rüdigsheim makes a very pretty architectural sketch, and its interior details are not given, so we may hope they are in keeping with the exterior.

In the *Antiquary* Mr. Martin continues his essay on "The Law of Treasure-Trove," and Mr. Benjamin Walker, an Associate of the Institute of Architects, contributes a very interesting article on "The Hundreds of Warwickshire at the Time of the Domesday Survey," with a map showing the probable position of the Hundreds in the year 1086. There can be few historical studies more fascinating than thus tracing out the early history of a county and the old names which have often survived through centuries in altered and modernised form, and with their original meaning watered away in orthographical changes. From the "Notes of the Month" we quote the following:—

"A final but futile effort has been made to rescue from destruction the remaining portion of the ruined Basingwork Abbey at Holywell. Some time ago the Flint County Council had the matter under consideration, but finding that the cost of protecting the ruins from further decay would be heavy, they decided not to move in the matter. Recently the National Trust and the Society for the Preservation of Ancient Buildings took the matter up, and requested the County Council to reconsider their decision, but without effect, the Council deciding finally to move no further in the matter. The result will cause a feeling of regret among Welsh and other antiquaries and archæologists, as the abbey has a most interesting history. It is supposed to have been built in the twelfth century, and belonged to the Cistercian Order."

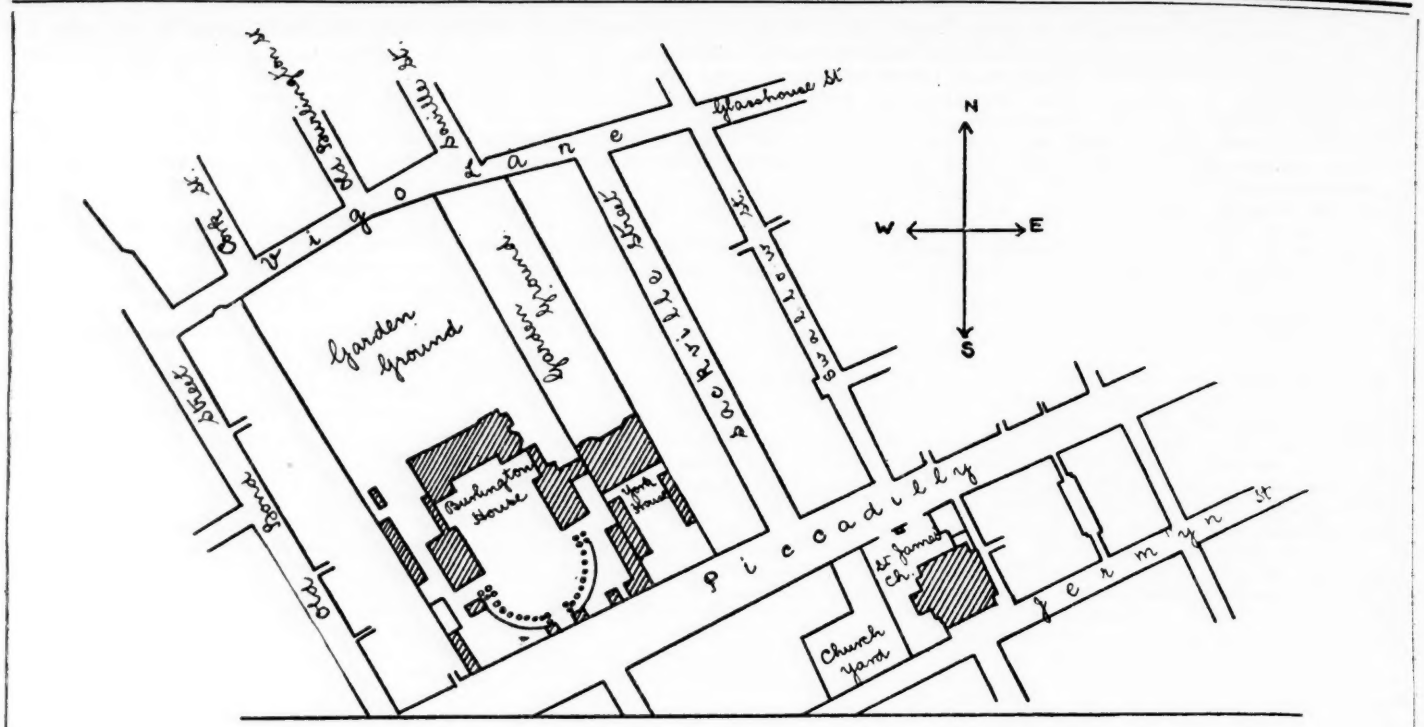
In *Knowledge* Mr. Antoniadi's papers on St. Sophia are concluded. He seems to regard himself as having proved the former existence of the cross on the exterior of the dome and of the *Pantocrator* figure on the interior, which is going too far; he showed reasons for their possibility, or perhaps probability, but not more. The number contains an interesting and learned correspondence on Dr. Wallace's theory as to the place of man in the universe, carried on by three or four astronomers whose arguments require close reasoning to follow, and perhaps do not convince one much either way; but the subject is one that cannot but appeal to every thinking person.

In the *Nineteenth Century* Mr. Alfred Higgins writes an article on "The Monuments in St. Paul's Cathedral," a subject which deserves more attention than it has received, for some of the older monuments, however poor from the point of view of the present day, are creditable and of interest as examples of the sculpture of their time, and Mr. Higgins is right in his remark that they have the merit of suiting the scale of the building; while the monument to Lord Leighton, which looked beautiful in the Lecture-room at the Academy, has not scale and massiveness enough to tell in the spaces and amid the large architecture of the cathedral. The article of course takes in the subject of the completion of the Wellington monument (it is on that account probably that it was written), and the writer of it is in unison with the Dean and Chapter and their little private scheme to get the monument finished by a sculptor of their own choosing, without consulting the public or the Government, whose concern it was, and not the Cathedral Chapter's. No special pleading will alter that fact. Captain Swinton, L.C.C., contributes an important article on "London Congestion and Cross Traffic," in which, while considering some of the existing causes which retard traffic in London he calls attention again to one quite needless drawback—the mixing of slow with fast (or would-be fast) traffic, so that a whole line of cabs and carriages is tied down to the pace of one slow van; a nuisance that ought to have been policed out of existence long ago. The main object of the article, however, as its title suggests, is to recommend the avoidance of cross-traffic interruption by the introduction of crossings at various levels—sunk streets or raised streets. We must refer the reader to the article for the particular suggestions made, which we have not space to consider in detail; many of them are worth attention. When Captain Swinton, however, says that cabs, &c, when in a hurry, take the Thames Embankment in preference to the Strand because they are not crossed there, he makes a point too much. We have often directed a cabman to go by the Embankment between Westminster and Catherine-street, but it is not because there is no crossing traffic; it is because the road is wider and it is not jammed by a string of omnibuses. It is the omnibuses that stop one in the Strand, not the cross-traffic, which hardly includes any omnibuses. In the same number the Rev. E. Ledger, the Gresham Lecturer on Astronomy, writes an article on the subject "The Canals of Mars—Are they Real?" His sketch of the history of the observations of the Mars "canals" should be interesting to those who have not followed out the subject, but when Mr. Ledger gives his support to the theory (which we have met with before) that these lines on the surface of Mars are illusions of tired eyes trying to see what it is difficult to see, we must say that we think this theory far too sceptical. That the lines are not canals of course we know; but that an appearance which has been seen by so many observers, some seeing more lines than others but many of them being identified by different observers—that all this is to be reduced to an effect in the observer's own eyes, is really going too far. Why do we not see lines in other telescopic objects? Has any one seen canals on the disc of Jupiter—a pretty wide area in a large telescope? Why on Mars only, if there is nothing special in the planet to cause the appearance? The number also contains an article on "Radium and its Position in Nature," a subject which is dealt with in our columns in the present issue.

The *Century* devotes a short article, by Mr. Sylvester Baxter, to Mr. Sargent's decorative picture, "Redemption," in the Boston Public Library; a piece of modern Byzantine work, as it may be called. It consists of a semicircular lunette in the centre of which is the figure of Christ on the Cross, modelled in relief as well as painted; this is the figure exhibited in the lecture-room at last year's Academy, with the figures of Adam and Eve bound, as it were, to the sacred figure by a horizontal band of drapery, and sitting or rather crouching beneath the arms of the cross and each holding up a cup to catch the blood flowing from the hands of the Redeemer. As we said when it was exhibited, though it is a fine piece of work in design and execution, the idea embodied, or rather the manner in which the idea is conveyed, is far too mediæval and too Romish in spirit for the walls of a modern building. Above this, symmetrically placed in the semicircle, are three cloaked and nimbused figures, of very Byzantine appearance, symbolising the Trinity; the faces of these also, we learn from the description, are modelled in relief. Below the lunette is a frieze of conventionally treated angels. The whole, we should think, must be a fine piece of decorative work, but we do not see why a modern artist should go back to Byzantine art for his inspiration for a work of this kind; it would surely have been more suitable to have endeavoured to illustrate the subject in a modern spirit. The same issue contains, under the title "The Conquest of the Forest," a picturesque account of an American "lumber camp," and the process of felling a gigantic tree, 10 ft. diameter in the trunk and 250 ft. high. A long description follows of the whole working of this great American industry.

Scribner contains an article by Mr. F. Weitenkampf on "Painter-Lithography in the United States;" that is, of course, lithography as used in original artistic production. Though the art of lithography was taken up in the States only twenty-three years after Senefelder's discovery, it has never been largely practised there. An artist named Bass Otis was the first American lithographer, and reproductions of his two earliest American lithographs are given; timid sketches of buildings and landscape, with too much line in them and not in the true style of lithography. But Rembrandt Peale's portrait of Washington, only seven years later, shows immense progress, and a perception of the true treatment of lithography in finished works. Of course Mr. Sargent and Mr. Whistler, who are Americans (though one rather forgets the fact) come within the scope of the article, and a bold lithographic study by the former is given among the illustrations. Among the other modern Americans the work of Mr. Ernest Haskell seems to be very good, and a "Pastoral" by Mr. J. Foxcroft Cole is an admirable work—quite French in style however. An article on the Sorbonne, the old and the new, with illustrations, will be of interest to architectural readers; the article, by Mr. Spearman, deals mostly with the history of the old Sorbonne, but there are illustrations of the new one. Under "The Field of Art," Mr. F. Fowler writes on "An Exponent of Design in Painting;" the exponent being Mr. Winslow Homer, an American artist whose sketches and studies, we are told, specially exemplify the value of design and composition. The example printed on another page of the magazine, a snow picture with a fox and crows near the foreground, certainly tends to bear out this judgment; the placing of the animal and birds which make the "darks" in the composition is most effective and evidently carefully studied, though we can hardly agree with the writer that composition is little thought of in modern art. Sometimes, indeed, it is the other way; a picture is regarded too much as a mere composition, independent of its intellectual meaning.

In *Harper* a critical comment on Shakespeare's "King John" is accompanied by some designs in black and white by Mr. Abbey which are exceedingly successful in conveying the character and costume of the figures represented in the play, as they may really have been—not as Shakespeare imagined them, for local colour as to place or time exercised little of a dramatic poet's attention in his day. "Photographing the Nebulæ with Reflecting Telescopes" is an article by Mr. Ritchey, Instructor in Practical Astronomy at the Yerkes Observatory, giving an account of what has been done, and a forecast of what may be done, by this means of astronomical investigation. The Yerkes reflector is only a 2-ft. one, but a French firm has produced one of 5-ft. diameter, and profess their ability to cast a 10-ft. one, a foot thick, which will be a success. The difficulty consists in getting castings on that scale without flaw or twist of any kind, and in mounting them so that their own weight in different positions may not distort them; and the writer states that there can at least be no doubt that an 8-ft. reflector can now be made that shall be as flawless as the Yerkes 2-ft. one. The casting is of course only the rough foun-



The Albany Site in 1792. (From Horwood's map of that date)

dation of the work; the formation of the complete mirror surface is a matter of subsequent grinding with the most delicate adjustment; no errors of form greater than two or three millionths of an inch can be allowed. As to the possibilities of an 8-ft. reflector, Mr. Ritchey says:—

"Judging from the results obtained with the 2-ft. instrument, an 8-ft. reflector, if used in a climate where atmospheric conditions are fine, would photograph stars which are fifty times fainter than the faintest stars which can be seen with the largest modern refractors. This means that such a reflector would enable us to penetrate seven times farther into space than can now be done with the greatest visual telescopes, and therefore that such an instrument would reveal to us a universe seven times seven times seven—more than three hundred—times greater than the universe which is revealed by the most powerful modern refractors.

Such a great reflector would give us photographs of the nebulæ of about five times the scale of the photographs obtained with the 2-ft. reflector; the delicate structure and minute details of these wonderful objects would be shown proportionately better, provided that the instrument were used in a suitable climate. I know of no opportunity which has ever been presented in the entire history of astronomy greater than that which now awaits us in the construction of a large modern reflector and its use in astronomical photography."

The *Pall Mall Magazine* contains "interviews" with five eminent artists, reported by Mr. Harold Begbie, on their various ideas as to "How to Paint a Picture;" but it is only small-talk, and if the interviews are really reports, or approximate reports, of what was said, the conclusion would be that the artists interviewed took care to avoid giving their interviewer any information of real value.

The *World's Work* contains a description of the Woking Crematorium and of the cremation system generally—an important but gruesome subject. We still think there is much to be said for "earth to earth." Cremation may have its hygienic advantages, but it thrusts the reality of dissolution more harshly and brutally on the survivors—in cases where the bond has been a close one—than mere consignment of the remains to rest in the graveyard. It is a subject that can hardly be settled on merely scientific grounds, until at least human nature and human feeling are much changed. Under the head of "Woman's Work" a short article on the "Modern House: a description and a forecast," may serve to indicate to architects what the advanced housekeeper thinks necessary now in the get-up of her house. He will find she wants a good deal. "An American correspondent" describes a visit to one of the Transatlantic Marconi stations. Those who are interested in the position and prospects of the agricultural population should read a short article on "A Remarkable Success in Small Holdings," describing Lord Carrington's experiment in letting lands in Lincolnshire (in the Spalding neighbourhood) to an Allotment Syndicate which re-let them in small lots; a transaction in which all parties seem to have had reason to feel satisfied.

The *Church Builder* (quarterly) contains an illustration of the small and ancient church at Lower Guiting, Gloucestershire, which has been nearly falling to ruin through the poverty of the agricultural district in which it is placed. Illustrations are given of its two good Norman doors. The church is now, it appears, being repaired and (so far as inevitable) restored. Messrs. Buckler & Comper's design for the church of St. Alban, South Norwood, shows a good and simple plan capable of some effect with the narrow aisles and internal buttresses (the section is not given), and with pleasing exterior treatment in orthodox Gothic style.

The *Revue Générale* contains an article by M. Victor Brants, on the working-mens' associations in Germany, and their social and political effect. The question of what in England is called "picketting," and its legality or fairness, we observe is also being raised in Germany.

The *Gentleman's Magazine* includes a popular article by Mr. J. Ellard Gore on "Air and Life"—the constituents of air and their relation to life.

THE ALBANY, PICCADILLY.

IT is announced that at a meeting of the proprietors on April 29, the Board of Trustees made a report whereby they recommend that offers for the purchase of the property should be invited for consideration. The buildings have been erected at successive periods upon the sites of houses of Robert and Charles Spencer, second and third Earls of Sunderland, in the reigns of Charles II.-George I., Sir Thomas Clarges (*temp.* Charles II.) and Lady Stanhope. No. 982 of the *London Gazette*, 1675, speaks of Sir Thomas Clarges's house as being "near Burlington House above Piccadilly," that is to say, the house built by Sir John Denham for either himself or Richard, second Earl of Burlington, father of the amateur architect. The garden grounds extended northwards between Sackville-street and the gardens of Burlington House, as far as Vigo-lane (now Vigo-street) and, with the Ten Acres-fields beyond, are delineated in the large bird's-eye view engraved by J. Kip, after a drawing by L. Knyff, 1707. The house, formerly called Piccadilly House, in the courtyard as entered from Piccadilly, was built for Stephen Fox, second Lord Holland, after plans and designs by Sir William Chambers, who was architect also of the screen, with entrance gates and a middle doorway having a Doric order and angle-pediment, of which we published an illustration, from a large water-colour preserved in the Soane Museum, on January 4, 1902. In our text of that date we cited various *data* in support of the belief that Chambers's screen was actually built in Piccadilly, though we can adduce no documentary evidence to that effect; it, however, is not plotted in R. Horwood's large-scale Survey of 1792. Lord Holland sold Piccadilly House in 1770 to Lord Melbourne, who employed James Paine to design two chimney-pieces, and Cipriani, Rebecca, and Wheatley in the decoration of the ceilings and other portions of the interior. Lord Melbourne subsequently exchanged the mansion to Frederick, Duke of York and Albany, for Melbourne, afterwards named Dover, House, Whitehall, and it was then called York House. York House with its long garden ground at the rear and the buildings on the two sides of the courtyard are plotted in Horwood's Survey mentioned above. In 1804 Henry Holland converted the house, since called "A," for sets of chambers; on the garden ground he built the additional two rows of chambers and the porter's lodges entered from the north; the buildings were then named the Albany, and some of the suites are freehold. They have had many celebrated tenants; amongst them being Sir Robert Smirke at H 1 in 1807-9; Lord Althorp, Lord Byron in 1814, and Sir E. Bulwer Lytton (Lord Lytton) in 1837, at A 2; George Canning in 1810 at A 5; M. G. ("Monk") Lewis, Lord Clyde, and Sir Charles Napier at K 1; W. E. Gladstone lived there (and was visited by Wordsworth) in or about 1835, and during the interval 1840-56 Lord Macaulay occupied E 1 and F 3; in the former he wrote some of his Essays and the first part of his "History of England." In one of his letters Macaulay says:—

"I have taken a comfortable suite of chambers in the Albany, and I hope to lead during some years a sort of life peculiar to my taste—college life at the West-end of London. I have an entrance-hall, two sitting-rooms, a bedroom, a kitchen, cellars, and two rooms for servants, all for ninety guineas a year."

The front gate of stone and the screen-wall of brick with stone piers of Burlington House, which is shown in our view of January 4 last year, and was designed by Colin Campbell, was together with the quadrantal colonnade within,

pulled down thirty-six years ago: see also an illustration in the *Builder* of October 28, 1854. The Duke of Devonshire at one time proposed to erect along the east side of Burlington House an arcade similar to the Burlington Arcade he had built after Samuel Ware's designs in 1818-9 along the west side of his property, but his project was successfully resisted by the owners and tenants of the Albany.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE annual general meeting of the Royal Institute of British Architects was held on Monday at No. 9, Conduit-street, W., Mr. John Slater, Vice-President, in the chair.

The Report of the Council for the official year 1902-1903 was submitted and adopted. The Report stated that it has been decided to award the medal this year to Mr. Charles Follen McKim, of New York, President of the American Institute of Architects. Mr. McKim will come to London to receive the medal in person at the meeting of the Institute on Monday, June 22.

The following tabular statement shows the present subscribing membership of the Institute, compared with that at the corresponding period last year :—

Year.	Fellows.	Associates.	Hon. Associates.	Total.
1902	617	1,071	44	1,732
1903	627	1,117	43	1,787

During the official year, since the last annual general meeting, thirty Fellows have been elected, sixty-eight Associates, and two Honorary Associates. One Hon. Corr. Member has been elected: Constant Moyaux (Paris). The number of candidates for the progressive examinations continues to increase. They were held in June (Final and Special in July) and November, 1902. The Preliminary was held in London, Birmingham, Bristol, Exeter, Glasgow, Leeds, Manchester, and Newcastle-on-Tyne; the Intermediate in London, Bristol, Glasgow, Leeds, Manchester, and Newcastle-on-Tyne; and the Special Examination for Colonial candidates in Montreal and Melbourne. The Council desire to record their thanks for the valuable services rendered by the hon. secretaries and examination committees of the various allied societies, and the Institutes of Quebec and Ontario, and the Royal Victorian Institute. The Final and Special Examinations were held in London. The results are shown in the following tabulated form :—

	Exempted.	Examined.	Passed.	Relegated.	Total.
Preliminary Examination	94	276	215	61	370
Intermediate Examination	5	196	105	91	201
Final and Special Examinations	—	126	70	56	126

The total number of candidates was 687, as against 674 in 1901. The total number of candidates in 1892 was 359. The number of probationers now stands at 1,900, and of students at 446. In the above statistics the Council desire to point out the new category of "Exempted" under the "Intermediate" heading. An arrangement has been made with University College, Liverpool, whereby any probationer of the Institute who, having been through the full two years' course in architecture, has obtained the Professor's Final First-class Certificate, and whose work done during his course at the College is found satisfactory by the Board of Examiners, may be exempted from the Intermediate Examination; the Institute being represented by a member of the Board of Examiners at the examination held for the purpose of granting certificates by the authorities of University College, Liverpool.

The Ashpitel Prize was awarded to William Greenwood, who passed the Final Examination in November, 1902. The Special Examination for Colonial candidates will be held this year in Montreal and Sydney.

The Deed of Award of the various prizes and studentships was presented to the Institute at a general meeting on January 19. An exhibition of the drawings was held from January 20 to 31 in the Gallery of the Alpine Club, and was visited by 1,264 persons. A selection from the prize drawings is now being sent the round of the allied Societies. The annual dinner will be held this year on Tuesday, June 23, at the Whitehall Rooms, Hôtel Métropole.

The Council sent an Address of Congratulation to his Majesty the King on the occasion of his Coronation. A scheme for decorating the front of the Institute for the Coronation on June 23, designed by Mr. G. F. Bodley, R.A., was being put into execution when the unhappy news of the King's illness was made public. The scheme was, however, carried out in order that Mr. Bodley's artistic design might be realised. A portion of the materials were utilised as decorations for the Coronation on August 9.

During the official year the Edinburgh Architectural Association has been admitted into alliance with the Royal Institute. The Council have much pleasure in recording the fact, as now there is no non-metropolitan architectural society of any importance which is not constitutionally associated with the Institute, and thus have been furthered the unity of organisation and the centralisation of architectural influence which have been the aims and policy of the Institute since 1889. The Council desire warmly to support the President in his views concerning the allied societies expressed in his opening address. They welcome any communications from the various Councils, either as suggestions of policy or requests for advice or assistance.

In the last Annual Report the Council stated that the Committee of the Architectural Association and themselves had adopted the recommendation of a joint Committee of the two bodies, that the Institute and the Association should combine in a building scheme to house both bodies under one roof. The Architectural Association, however, having decided to take over the premises of the Royal Architectural Museum, consideration of this joint building scheme has been abandoned. The question of new premises for the Institute is one which the Council have always before them; but they feel that it is wiser to wait for a favourable opportunity of securing a site that meets with all the requirements of the Institute than to commit themselves to any undertaking to inaugurate a building scheme within a definite period. As a favourable opportunity may not occur in the immediate future, the Council have made certain improvements in the meeting-room which they hope tend to the comfort of members as well as to the convenience of the working of the Institute. In order to obtain proper picture space, so that the valuable collection of portraits may be seen to the best advantage, the recess behind the chair has been altered according to the design of Mr. J. S. Gibson, who kindly acted as honorary architect. The new system of electric lighting by means of reflection from the ceiling has been carried out under the direction of Mr. J. Slater and Mr. E. T. Hall. The wall opposite the chair has been lined with bookcases, which will relieve the pressure on library space for some time to come. With regard to the portraits of past Presidents, the Council have decided to issue an album of photogravure reproductions, with spaces for future plates. This album will be obtainable by members at a price to be hereafter settled.

The Practice Committee have done excellent work this session for the Institute. To them is due the book on dilapidations published this year. A form of contract, for use where quantities form a part of the contract, prepared by the Practice Committee, has been issued as an Institute publication. With regard to the point raised on the discussion of the last Annual Report, as to the possible effect of the decision given in the case of Hobbs *v.* Turner upon the validity of the Institute Form of Contract, the Council have been advised by the Institute's solicitors that it is unnecessary to alter the present Form in view of that decision.

The London Building Acts (Amendment) Bill, submitted by the London County Council for the criticism of the Institute, was investigated by the Practice Committee, who issued a report to the Council. The Council were considering this report, having in the meanwhile signified to the London County Council their opinion that the measures proposed were far too drastic to obtain their support, when the Bill was suddenly withdrawn. The Council will take the necessary steps to advise the London County Council with regard to the provisions of any amended Bill. The Ancient Lights Bill, approved by the Council of the Institute and the Council of the Surveyors' Institution, is now in the hands of Mr. J. Fletcher Moulton, K.C., M.P., who has kindly undertaken to be responsible for its introduction into Parliament.

The Council sent in a petition to the Privy Council praying that a Royal Charter of Incorporation should be not granted to the Auctioneers' Institute, on the grounds that such a grant would seriously affect the value attached to the possession of a Royal Charter. The petition of the Auctioneers' Institute was refused.

At the general meeting of March 2 the President made an announcement with regard to the question of registration to the effect that the Council were still opposed to any such scheme of registration as that set forth in a previous Bill dealing with the same subject. The Council have since issued a memorandum to the Presidents of the Allied Societies.

The operation of part of the proviso of By-law 9 lapses this year on May 18, viz., "Provided always that when the Council of the Institute receive a unanimous recommendation formally submitted by the Council of any Allied Society that a practising member of the profession is eligible and worthy of being elected as a Fellow, the Council shall, during the five years from the date of approval of this provision by the Privy Council, have power to elect him, if in their opinion his work be of sufficient merit." The second clause :—"The Council shall also have the power to elect annually to the Fellowship without ballot the President or President-elect of any of the Allied Societies who may be eligible and apply for admission," is not subject to the five years' limit.

In the autumn the London County Council announced their decision to abandon the design of a stone bridge at Vauxhall, and to replace it by an iron and steel structure designed by their Engineer. The Council inspected the design and reported adversely to the London County Council, urging them to call in the services of an architect. After some correspondence, the Council were informed by the London County Council that their Architect would be called into collaboration with their Engineer. The principle of the association of engineer and architect in bridge building which they have so long urged has thus at last been admitted by the London County Council.

The Council have taken action with regard to the proposed demolition of All Hallows' Church. A letter was written to the Ecclesiastical Commission to the following effect :—That the Institute views with regret the proposed demolition of another of Sir Christopher Wren's churches, which has a peculiarly successful interior, and desires to express the hope that means may be found to preserve the building intact; but that if circumstances prevent this, the church should, if possible, be re-erected upon a suitable urban site, stone by stone, and in any case that the fittings should be suitably rehoused in a building of the same character, where the whole of them could be brought together so as to preserve the unity of their design.

In the last annual report reference was made to the question of the appointment of assessors in competitions, and it was stated that a Select Committee of the Council were considering the various matters referred to them. The Council duly received the report of their Committee, and were brought to the conclusion that the appointment of assessors was best left entirely in the hands of the President of the Institute, and that, even were it desirable, there was little chance of success in trying to establish the jury system in this country. A practical result of these deliberations was (1) a revised edition of the "Suggestions for the Conduct of Architectural Competitions" and (2) a confidential set of suggestions for the guidance of assessors. A copy of the "Suggestions for the Conduct of Architectural Competitions," with a circular letter, was sent during the summer to every Town Council, Urban District Council, and Rural District Council in the United Kingdom. The Council have empowered the Competitions Committee, so as to avoid delay, to take independent action where necessary in respect of any competition within the scope of the "Suggestions." To prevent possible misconception among members, the Council desire to state that in the great majority of cases the unsatisfactory points in conditions are of so obvious and simple a nature as to be adequately dealt with in the routine of the secretary's office without troubling the committee to meet.

The Council also desire to refer to the Competition Reform Society, with whose aims they are quite in sympathy. The Society reports to the secretary of the Institute any competition matter that may need investigation. The matter being thus placed in the secretary's hands becomes an entirely Institute question, and in furnishing such material for Institute action—material which it would be often impossible to obtain officially—the Competition Reform Society is doing exceedingly useful work.

Mr. E. T. Hall and Mr. Thos. W. Cutler have been appointed by the Council to represent the Institute at the Annual Congress of the Sanitary Institute, to be held in Bradford in July. Mr. Alfred Culshaw has been appointed by the Council to represent the Institute at the Annual Congress of the Royal Institute of Public Health, to be held in Liverpool in July.

In presenting the statement of income and expenditure and the balance-sheet for the year ending December 31, 1902, and the estimate of income and expenditure for the current year, the Council have again the pleasure to draw attention to the continued financial prosperity of the Institute. The balance of income over expenditure of 1,028*l.* 15s. falls somewhat short of the estimated balance, but the unforeseen expenditure for the Coronation decorations accounts for the difference. Owing to the many additions made in recent years, the property of the Institute was found by the Council to be considerably under-insured. The Council at Michaelmas therefore took out a fresh policy with the Westminster Fire Office, to the total value of 22,700*l.*

The Council have this year invested the sum of 1,119*l.* 16s. 10d. in the purchase of Great Western Railway stock. The total invested capital of the Institute amounts to 12,838*l.* 19s. 3d.

The Reports of the various Committees were appended.

The Report of the Art Standing Committee states that the matter of the design for the new Vauxhall Bridge has been the principal business engaging the attention of the Committee during the current session, and it is gratifying to know that in consequence of the Committee's representations made to the London County Council, the design formerly proposed has been discarded. The Committee are also glad to intimate that the County Council have decided that their architect shall be associated with the engineer in regard to the design and architectural details of the structure. The work of the widening of London Bridge has been in progress during this year, and the suggestions of the Committee regarding the details of the design have been practically adopted by the Corporation.

The Practice Standing Committee reported that the book on dilapidations was submitted by the Council to a general meeting of the Institute, and, having been approved, was ordered to be printed and published. This has been done, and the book is now on sale. It having been reported to the Committee that the London County Council had an intention to amend the London Building Act (1894), the Council was asked to approach the London County Council with a view to the Institute having an opportunity of expressing its views on the proposed Bill. This resulted in the London County Council inviting the Institute's comments on their Draft Bill for increasing the safeguards against accidents by fire in buildings, entitled the London Building Acts (Amendment) Act. Seven special meetings were held by the Committee at short notice and the Bill was fully considered in detail. In addition two Joint Sub-Committee meetings were held at 9, Conduit-street, with representatives of the Surveyors' Institution. The Committee also conferred with the Committee of the District Surveyors' Association. A report was made by the Committee to the Council, and the chairman, Mr. J. Douglass Mathews, attended before them to explain the Committee's views. The report was afterwards discussed at a general meeting of the Institute, but on the day following the London County Council decided, owing to the opposition with which it was being met, to withdraw the Bill and to introduce a new measure at a future date.

In accordance with a reference from the Council, the Committee have had under consideration the production of a form of architect's certificate and have recommended a form to the Council for adoption. They have also suggested that this form might be published by the Institute in book form.

In accordance with a reference from the Council, the Committee have had under consideration the question of the preparation of a form of sub-contract for use between the general contractor and sub-contractors. The Committee are still considering whether it is expedient for architects to be parties to, or to be concerned in arranging, such sub-contracts.

The preparation of a form and conditions of contract for use where quantities are made part of the contract, was undertaken by the Committee, and the form is now issued by the Institute.

The opinion of the Committee has been sought on several points of professional practice, and especially a recent case in the Court of Appeal in which a contractor, having undertaken to carry out a building in accordance with the drawings and specification, was held to be unable to recover for loss sustained by admittedly inaccurate bills of quantities.

The Science Committee reported that the proposals of this Committee with regard to the standard size of bricks have been provisionally agreed to by the representatives of the various Brickmakers' Associations. The matter now only awaits the ratification of these proposals by the Brickmakers' Associations. The Committee hope that architects and engineers will insert the standard in their specifications, and so check the serious differences in size of bricks that interfere with good sectional bonding.

The Committee are pleased to report that the suggestion they made, that the administration of the various Acts of Parliament relating to drains old and new, should be placed under the Borough Surveyors, has been supported by the London County Council, and they have asked the Council to support the resolution the London County Council sent to the Local Government Board to this effect.

At the invitation of the Institution of Civil Engineers and with the assent of the Council, this Committee was represented upon the Committee of the engineers for standardising joists, tees, and angles, and they are glad to say that practically every suggestion put forward by this Committee was adopted.

Mr. Louis Ambler and Mr. W. A. Forsyth having been renominated as auditors for the ensuing year of office, the existing members of the Statutory Board of Examiners under the London Building Act, 1894, and other Acts of Parliament were reappointed for the ensuing year of office.

The meeting then terminated.

THE ARCHITECTURAL ASSOCIATION.

THE last ordinary fortnightly meeting of the Architectural Association for the present session was held on Friday last week in the Meeting-room of the Royal Institute of British Architects, No. 9, Conduit-street, W., Mr. H. T. Hare, President, in the chair.

The minutes were read and confirmed, and the following gentlemen were elected members of the Association, *i.e.*, Messrs. R. Haensler, C. R. B. Murphy, J. P. White, and G. Hornblower. Mr. A. Dicken was reinstated as a member.

Mr. H. P. G. Maule, hon. secretary, proposed a vote of thanks to Mr. Arthur Keen for conducting a party of members over the new Baptist Church House, Holborn, on April 4, and for entertaining the party.*

The vote of thanks having been agreed to,

The following votes of thanks were, on the motion of the Chairman, agreed to, *i.e.*, to the Royal Institute of British Architects for their twelfth grant of 100*l.* towards the educational work of the Association and for the use of the Meeting-room; to the School of Design Visitors; to the Technical Education Board *re* workshop demonstrations; and also to the Press.

The Chairman announced that the members' supper will be held in the Hotel Great Central on Friday, May 15.

Architecture and the Public.

The following paper was then read by Mr. A. Needham Wilson:—

It may be considered that in selecting such a subject as "Architecture and the Public" I may be travelling over well-worn ground. I hope to avoid the charge; for a threadbare fabric is scarcely improved by further embroidery of the old pattern, but may present new aspects if held in differing lights. It will be my endeavour to offer for your consideration these differing lights, in the hope that the aspects may occasion some opening for useful discussion. As I look back over the period during which I have dwelt in the architectural world (a longer period than I like to contemplate sometimes) it appears to me that I have witnessed a remarkable change. The old order of things has passed away, and the architectural era I now live in is a very different one to that which witnessed my architectural birth. I do not intend to emulate either the keen insight or the eloquence of Professor Pite's review—read before the Institute recently, and that masterly *résumé* is probably too fresh in your minds to require any enlargement from me. We have passed through many stirring influences. We underwent the ordeal of the Aesthetic era in emerging from the Victorian—we had a severe attack of the "Queen Anne"—and recently we have suffered more or less from a strange disease known as the "New Art," from which we are scarcely convalescent. We have fortified our constitutions with the school of Norman Shaw. We have trembled in the throes of the Gothic revival and the influences of the Oxford Movement, and we have seen as the outcome a new and, I venture to think, a sturdy development of ecclesiastical architecture. And a greater appreciation of the Renaissance stock has encouraged the grafting of some vigorous shoots on that fine old tree.

New methods of training have been established, and the powers that be have been more or less alive to the necessity of keeping abreast of the rapid changes of this strenuous age and the demands thereby created. It is pleasant to feel that our Association has been and is anxious to meet those demands and to furnish the rising young architect with the equipment necessary to encounter them. Is it too picturesque or overdrawn to imagine English architecture as a giant awaked from sleep, and ready and anxious to battle successfully under the new conditions amidst which he finds himself; still stretching his powerful limbs and yawning a little? I believe, by the way, architecture is generally represented as a lady—but let that pass.

If it be granted that we are living in a transitional age, and that the old order of things has passed away, that as a nation we are awaking to the knowledge that we can no longer plod along in our old stubborn way, but must bestir ourselves, unless we would be left behind and unheeded in life's race, are we architects fully alive to the fact?

New inventions, new ideas, new demands, new conditions, new uses for materials crowd upon us and increase daily. We have a differently constituted public to cater for, with an education which makes them infinitely more difficult to please than formerly, and yet have we succeeded in awakening generally a greater appreciation of the beautiful in art as far as we are concerned. Have we succeeded in more than meeting the demands of sanitary and constructional enlightenment? Are we leading or being led? Is architecture to-day an educational force calculated to elevate and teach and brighten the existence of the masses, or to relieve the dull grind and monotony of the great middle classes, or the sordid and deadly dull existence of the workers? Are we as fully equipped for this position as we ought to be, or even alive to the necessity, or is it all the idle Utopian idea of the dreamer, and shall we meet it with the reply that it cannot be done at 5 per cent.?

Further, has the status of the architect at all improved, or is he still considered a visionary, an unpleasant necessity, or an unmitigated nuisance, whose services may be dispensed with if possible? Can he command, any more than before, the tribute to brains and genius ungrudgingly given to the successful painter or sculptor, or can he appeal to the popular imagination with the expression of those brains and genius, as can the engineer. It may not be the ambition of all to appear in the illustrated papers or the cheap sensational dailies, or to be the cause of a torrent of dull statistics served up in attractive form for popular consumption in cheap magazines. But every architect in his soul must hanker even modestly for that deference, that indefinable bowing down, as it were, to the great ideals (which he often feels he so unworthily represents) from an appreciative public. But have we an appreciative public? One that can recognise genius when it exists?

* See our issue or April 11, p. 389, for an account of the visit.

It can scarcely be claimed that we are artistic as a nation. Art with us is not spontaneously produced, it is rather the result of forced effort; it is not the natural outcome of inherent liking—which will evolve art unconsciously, without knowing that it is art. As a nation we do not produce art unconsciously, and as a nation we are not aware of the fact. The painter appeals more directly to the public than either the architect, sculptor, or craftsman; not because the public appreciate painting as an art—but because it presents subjects which they like to see pictured in a way they understand. They are probably equally pleased with coloured photographs. In spite of our schools of art, and all the machinery for inculcating a true and natural appreciation of painting as means of representing the beautiful, how many of the vast crowds who throng the galleries of Burlington House are capable of judging whether a picture is good or bad either in drawing or colour. If they take any interest at all, it is only a languid sense that the subject pleases them in some undefined manner. And if this may be said of painting, wherein a serious effort has been made to train the public mind, how does it apply to the work of the sculptor and the craftsman, and still less the architect?

Yet I think even I can detect a growing appreciation of art, for art's sake, as expressed by the painter, the sculptor, and the craftsman, an appreciation that is gradually spreading, and even now with the public is supplanting what I may term the oleographic epoch. I hope I can detect signs of an appreciation of better things in domestic decoration, furniture, and ornaments. Is it too optimistic to trust that the era of hideous flowered wallpapers, marble mantlepieces, grained woodwork, ugly mahogany, glass lustres, dyed grasses, and wool mats, and their deadly dull atmosphere of sordid respectability is giving way to a craving for something better? The dull monotony of the struggle for existence is leading to a yearning for that which will brighten the grey and leaden hue of the lives of the great mass of the people. In their ignorance it may have taken a trend which we frequently deplore. It may be too often found expressed in tinted glass of an assertive nature, circular stone columns with real carving, at the angles of the everlasting bay window, cast-iron monstrosities of various forms, and the wierd introduction of so-called "half-timber." But we have not as yet succeeded in abolishing the deadly dreariness of the interminable streets of "villas"—long, wearisome vistas of endless monotony—the drab of which must be reflected in the lives of the unfortunates who dwell therein. Yet even the speculative builder caters for tenants with some approach to what he fondly imagines is art, finding that the "half-timber" is worth an additional 5*l.* on the rent. Shall we see the day when these interminable rows of dwellings, ground out of the speculative builders' mill, will give place to cheery and well-designed groups of houses facing their common green quadrangle.

Well, I venture to assert, not until we architects have a hand in the matter. Not until we have succeeded in moulding the popular mind into a far greater appreciation of the beautiful as expressed in architecture; not until we have suppressed the prejudices against us, and created such a demand that it will be as natural to employ an architect as it is now for the builder to draw himself one set of plans for a hundred houses. For any building of importance, and for many a private house, the services of the architect are felt to be a necessity, though this feeling has scarcely reached the stage when the architect will co-operate with the engineer and the contractor as a natural thing; when the public will insist that its engineering works must no longer be blots and eyesores, but possess a definite beauty.

I venture to think that as architects we hardly grasp the importance of the influence of our work upon the social well-being of the people. Do we not design too much for ourselves and our self-gratification? I suggest that we count too much upon the solid insular reserve of the Briton, and too little upon the emotional side, which it is our national characteristic to repress. As a case in point, may not the indefinable religious atmosphere of a church stir the emotions, or fail to do so, according to its sense of fitness for its sacred purpose? The man who can evolve deep devotional feeling in a cold, bald surrounding must be a devotee, and how few modern churches impress the worshipper with that sense of almost reverential awe which surely a church should create. If the emotions may be stirred by music, why not by architecture? However dull, however hardened a man may be, surely he must be unconsciously influenced by his environments, and may I suggest in this we have a means of educating our fellow men to a fuller and healthy appreciation of our work. It seems to me that this is a great responsibility, and one far greater than that hinging on questions of stability. This sense that the work of one's brain is an educating power for good or ill, to be handed down to future generations, and either held up to public derision or pointed at as something to be admired; or else utterly ignored. I think I would prefer to have my work held up as a something to be avoided than not have it noticed at all. And yet how many buildings in this unwieldy Metropolis attract even a passing glance from the hurrying thousands. Whose fault is it? It is easy to rail against the supineness of the public; but is that the true explanation?

And yet I suggest that there are signs that the public are slowly awaking to the fact that there is such a thing as beauty in building. They may not as yet have the trained appreciation which teaches them what should constitute beauty, but I think most architects will be prepared to endorse the opinion that they have to cater for much more critical clients than was formerly the case. Further, I will go so far as to maintain that the public are beginning to realise that a building may actually be ugly. Their ideas of beauty and ugliness may not coincide with either yours or mine, but the fact that they are not always prepared to accept the architect's *dictum*, though adding to one's difficulties, may surely be welcomed as a distinct advance, and one that offers a fine educational field.

Some may not consider this "a consummation devoutly to be wished," and may hold that a new terror is added to the profession, when every man who believes he can edit a newspaper or write a play better than any one else will add a little dabbling in architecture and a dangerous knowledge of construction and sanitation. Picture the time when the egg-and-tongue wallpaper border will no longer be fixed upside down, or when it will no longer be held that warm carbonic acid gas lies on the floor! I fear our profession will be robbed of its humours. But do we not see on every hand this awakening knowledge and keener interest in our work? If only it all can be turned in the right direction, I venture to prophesy that no registration of architects will be necessary to protect the public against incompetent or unqualified men, but that the public will no more employ such men than they would an incompetent or unqualified lawyer.

Why, even the Press—not a bad barometer, by the way—has been reflecting the movement, and, when reporting upon the opening of a new building, has even illustrated it occasionally, and actually in some instances mentioned the name of the obscure individual who has conceived it, and carried the work of his brain into concrete form. Through what anxiety, what difficulties, what exacting labour, weary days and weary nights, obstacles innumerable, it matters not; but the public are actually aware that a brain has conceived the building, that it has not developed spontaneously under the hands of the builder, and so the name is given, as subsidiary to the builder perhaps—but still it is given.

I do not wish it to be thought that the aim and end of an architect's career is to be mentioned in the papers. I merely mention the matter as a sign of the increasing interest of the public in the creations of our brains.

We are perhaps too ready to dwell on our grievances against the public—sometimes real, sometimes imaginary—and into these I do not, as I said, propose to enter. But what I would ask is, Have the public any legitimate grievances against us? Personally I hear of them constantly: "Oh, you architects are so impracticable. You allow matters of convenience and common sense to become a secondary consideration in your over anxiety to give undue prominence to your beauty. You always insist on having what *you* want, not what *we* want. You know nothing of ventilation; you never consider the domestic working of a household; and you can never carry out your work for the price named, and your fees are most exorbitant; the next time I am fool enough to build I will get a builder to work on my own ideas;" and so on.

I daresay all of us have heard something of the kind, and beyond a momentary feeling of irritation have put it aside as something utterly irrational. Probably it is in most cases, but may there not be a sufficient substratum of truth to require consideration?

The many-sided character of the profession shows no tendency to diminish, but rather to increase, and the exigencies of a modern architect's practice call for a dozen experts merged into one. He never knows what the scope of that practice may demand: anything between the designing of an altar cloth or chalice veil to the settling of some intricate legal difficulty or the cure of a smoky chimney. He must be a sanitary specialist, a ventilation specialist, and a constructional specialist; capable of supervising or arranging the installation of electric power or light, acetylene gas, heating apparatus or laundry machinery, lifts or cooking plant.

He must be *au courant* with the latest fad; must advise on all forms of decoration; be an artist in colour schemes; understand the stoking of a kitchen range, or laying out a garden. He must have an all-embracing knowledge of the nature and properties of materials; and, if we are to judge by the advertisements for assistants in the professional journals, must be a quantity surveyor as well. Small wonder if, in his anxiety to find scope for a little design, and comply with the innumerable by-laws, Building Acts, and vexatious regulations, he occasionally puts drawing-room handles on a class-room door, passes Swedish timber as Russian, or omits to specify a stick for the scullery copper. I am not quite sure that we are alive to the full demands of the age, or that we are taking steps to keep ourselves fully abreast of it, or that not only ourselves, but those who will take up our pencils in the time to come, are efficiently equipped for the modern architects' career.

I do not think as yet we fully recognise the changed conditions under which we practise, and unless we do, some foundation will continue to exist for the charges levelled against us.

One of the problems of the age is undoubtedly the domestic servant difficulty, and I venture to suggest that we have so little grasped the fact that we neither design our houses to minimise the evil, introduce labour-saving appliances, nor so decorate as to lessen work. I do not think we are far-seeing enough. We design for the moment—perhaps on the principle that "sufficient for the day is the evil thereof." The time seems to be approaching when the middle class will not be able to procure domestic servants at all, and when that time comes we cannot expect every one to build afresh or to live in flats. The ingrained liking in every Englishman for his own little castle will not be eradicated readily, and the problem is to make that castle practically independent of domestic labour.

Small wonder that the lady of the house, overwhelmed by her domestic worries, rails against the architect who has aggravated them.

Are we ahead, not abreast, of the demand for technical education in these days? Are we conversant with the recent scientific discoveries? Are we making proper use of new inventions and applications of materials? Are we taking the measures we should to minimise fire risks? I do not know that we are. I will not extend the list, lest I try your patience.

Hedged about as we are with difficulties, hampered at every turn, we can neither experiment on our clients nor at their expense. Our opportunities of testing materials are limited, and we fear to attempt new departures lest they prove failures and bring down upon us the wrath of our clients. No wonder we are dubbed old-fashioned and accused of lagging behind the age. If I am correct, and I admit my assertions may be disputed, I do not think we should be hampered. With all respect, I would offer one or two suggestions to the Institute, not at all as criticisms, but as expansions of its usefulness.

First. Cannot some of its funds be devoted to such valuable tests of materials as, for example, those recently applied to brickwork, which, I believe, are now taken as the standard? I cannot but feel that the Institute could further the welfare of the profession to a much greater extent than it does in this way. I venture to think that a series of tests of cements, especially

as to their expansive properties, would be invaluable, and further, in view of the behaviour of steel girders and stanchions during a fire, how far concrete with steel rods can be substituted. The question of fire protection is so important a one to the public that some definite data for those who are endeavouring to combat the difficulty would surely be highly welcome.

Second. Cannot evidence as to the behaviour, advantages, or disadvantages of certain materials, fittings, and appliances be collected and published?

Manufacturers are doing much to keep level with the times, and all sorts of new ideas are showered upon the practising architect. If one of these ideas commends itself to me, if I think it grapples in a common-sense manner with some difficulty, or is an improvement on a preceding invention, I should like to make use of it, but in nine cases out of ten I dare not. I have no evidence that it is a success. If I boldly adopt it, and it turns out satisfactorily, well and good, but if otherwise, I have to endure the rage of a client who instantly puts me down as incapable or crazy.

It is too much in the nature of an experiment. I would suggest that such ideas, such inventions should be considered, and if thought to be of value to the profession should be thoroughly tested, that evidence of their behaviour should be gathered, and that such information should be accessible to members of the Institute. I am not sure, but I think manufacturers would welcome such a test, and the profession might be spared a considerable amount of rubbish, and while avoiding the necessity of constantly falling back on things which are nearly obsolete, would encourage the manufacturers to a wholesome emulation.

I am quite prepared to be told that all this is utterly impracticable. Perhaps so—but I am certain of this, if the Institute do not establish something of the kind some other body will.

I need only mention one matter to illustrate my point. I suppose one of the greatest difficulties we have to encounter is the work of the plasterer, and recently attempts have been made to find efficient substitutes, but as far as I know with only moderate success. Here, then, is a field for investigation.

Third. Cannot the Institute afford facilities for the testing of materials at a cheap rate to its members?

Here is a matter in which our governing body have already been forestalled.

The National Physical Laboratory is prepared to undertake such tests at a moderate charge I believe—to a limited extent—but I suggest that this is a boon which membership of the Institute should confer, and would be of more practical value than knowing how the Greeks set out a volute.

If I wish to specify a cement, if I want to know the strength of a particular type of brick, if I am doubtful as to the quality of my timber, or if I want to know whether the plasterer has introduced garden mould into his rough stuff, I think my Institute should afford me the necessary facilities for ascertaining the information.

Fourth Cannot an elementary knowledge of chemistry be introduced as one of the subjects for examination?

I cannot conceive of any subject more important to the practical architect, and yet one more generally neglected. I think the advantages of even an elementary knowledge of such a subject are so very obvious that I need not weary you by recapitulating them, but I imagine chemists must stand appalled at the alarming ignorance of men who deal with substances without knowing their properties.

As an example, why should it gravely be proposed to dispose of the vitiated air in a room by "drawing off" carbonic-acid gas from the *floor*, under the impression that it is heavier than air. A little elementary knowledge would prove that warm carbonic-acid gas is lighter than cold air. Where air and carbonic-acid gas are of the same temperature, it is perfectly true that the latter is some two and a half times heavier, but having regard to the high co-efficient expansion of gases, it should be obvious that carbonic acid gas, as produced from human bodies and artificial lights, is at a high temperature, and therefore so far expanded that it rises readily through cold air.

Are we not far too dependent upon so-called experts, who themselves lack the definite technical training which should make their services of any real value?

It is in considering such questions as these that it appears to me an intelligent knowledge of chemistry and physics, as applied to ventilation, materials, and hygiene, should form part of the technical training in the equipment of the architect of the immediate future. Therefore, I would ask the Committee of the Association to consider the advisability of establishing a simple laboratory and the necessary instruction.

If the architect is hampered by insufficient technical training, how much more is he hampered by the lack of any such training at all in the workman—not only the artisan, but the labourer.

As a case in point, may I instance a labourer, who in filling up with dry rubbish under a tile floor, included enough lime to blow up the floor and cause considerable worry—which, of course, recoiled on the architect. I maintain that no architect should have to stand over a workman to prevent such results of ignorance. Ignorance like that should not exist, and I for one would welcome any system of technical training which would not only create efficient workmen, but give them an intelligent interest in their work. Perhaps then we might have less deficient workmanship, less friction, and the long-suffering architect would not be goaded to the last pitch of exasperation.

Perhaps, too, in time our employers will come to realise that the scale of remuneration is not always such that it should command the services of many experts in the person of one man, who, if he is to earn a decent livelihood must so overburden himself that he cannot give the attention he would wish to minute details. At present the public little realise the immense amount of labour represented by an architect's services. Their idea of his labours generally being comprised in the notion that he sits down in an easy-chair for an hour or two and produces a pretty sketch, for which no brain-work is required. When it is realised that the services of such an expert as an architect are a valuable commodity, it may be that it will be made worth his while to devote such services to fewer things at a time, with advantage, I venture to think, to both parties.

If an architect could but take up his job, make it his pet, live in it, and revel in it, as a painter does his picture or the sculptor the work of his chisel—if he could make it the fitting home for the work of these artists or the craftsman—untrammelled by sordid considerations—I think we should hear less of the grumbling, and perhaps receive a word of grateful appreciation with the final cheque, more than repaying the months of anxious thought, and unwearying devotion, and endless trouble and worry.

It is coming to this, that with the multifarious requirements now demanded of the architect, life will be too short to cram into it the requisite amount of study, and we shall have to specialise more and more. It may be that our system of training is too general and too superficial, and the problem will be to develop the particular bent, to encourage the special talent of the young beginner. I am not sure, myself, that our present system of training is by any means perfect. I think far too much time is spent over "the orders," to the detriment of more important subjects. What does it matter that the student should determine the proportions of the Parthenon to a hair's breadth, and be called upon to judge between the measurements of various authorities? Are we to breed architects or mere antiquaries? What does it matter if a student does not know the difference by name between an "apophyge" or a "cyma recta," or that he cannot give offhand the name of the man who designed the Parthenon? Is he less likely to turn out a practical architect because he does not know these things? Does it give him greater power of design, or a keener sense of the beautiful? I do not wish to deprecate for one moment the advantage of a good sound grounding and solid knowledge of all on which we base our modern architecture, but I do strongly deprecate the trifling with unimportant details to the exclusion of more urgent matters. As I said, if the particular bent of the student can be determined after a period of general training, then will be the opportunity to insist upon a proper understanding of the minute details connected with that bent. I cannot but feel that in our anxiety to emphasise the artistic side of the profession, we have swung a little too far, and the public have developed some impatience with us and our methods, and it is high time to show them we can be artistic and practical as well.

Further, we are a humble minded folk, much to our detriment. We have not sufficient self-assertion or combination. We take little heed of criticisms or attack, and we rarely concern ourselves as to whether they are justified. We live too much in a little world of our own, and scarcely realise that we are a vitalising force, and should make ourselves a vital necessity, and a tremendous educational power. There is too much individualism amongst us. Why should any one of us be left to fight out as best he can some vital point, intimately affecting the weal or influence of the profession as a whole? Why should a single individual be left to fight for a principle? He should have the whole weight of the profession and its leading body at his back, provided the cause is just. Far too often have we to acquiesce in some palpable injustice because we dare not, cannot stand alone.

What weight do we carry as a body? If some glaring vandalism is contemplated, who attaches any weight to our feeble protests? Things are perpetrated which should raise a storm of righteous indignation, and we shrug our shoulders and placidly go on our obscure way. Our streets are made hideous by every Philistine method that can be compassed by the wit of man, and we content ourselves with a nervous grumble. Now the public are beginning to open their eyes to the sordid dinginess and dead level of monotony which surrounds them and the rampant ugliness on every hand. They are casting about for means of delivery from this blighting ugliness of commercialism which crushes them down, and it is for us as a body to proclaim ourselves their emancipators, to set ourselves at their head. It is for us to raise the oriflamme of a new era of brightness and beauty adapted to the practical needs of the age, before municipalism sweeps us one and all into a chaos of general commercial utilitarianism.

In conclusion, I feel some apology is due for the unintentional prominence of the personal pronoun in these notes, but on such a subject it is unsafe to dogmatise, and better to stand or fall on the merits of ones personal opinions. I am quite prepared to have them mercilessly criticised, and I do not claim that they are particularly new, and if any of them are, I will cheerfully accept the statement that they are quite worthless. If I have but offered, however crudely, a field for useful discussion from wiser heads than mine, I shall be more than content.

Lord Windsor, who was called upon by the Chairman, said that he did not know that he had any right to address them except for the reason that the admirable paper they had heard had not been a purely technical one. He might first refer to a little personal matter, *i.e.*, that he had had the opportunity of calling in the services, the knowledge, of architects in a way which did not often fall to the lot of most people—that was to say, in building a house in the country and another in London; and the result, so far as those architects were concerned, would redound to their credit for generations to come. One remark which Mr. Wilson made seemed to be very true, but it was common to education in its various branches at the present day, and that was that modern work tended to extreme specialism. The most scientific men of the day were unable, as our predecessors were able, to follow science over a large area, and as each one desired to attain a higher point in the investigations he was engaged in, he was compelled, year by year, to specialise more than did his predecessors, and to devote himself to one branch of work and even to narrow that. This was no doubt true, to some extent, of the work of the architect, and no doubt his difficulties were increasingly great now that the public obliged him to make himself acquainted with a large number of subjects which he would have a right to think should be dealt with by the specialist. At the same time he could not but think that it would be a pity to narrow more than could possibly be helped the great conception of architecture. In thinking of architecture one always remembered the great time of the Italian Renaissance, and—though he did not know that it applied to all schools in Italy—especially to the Florentine school. The great men of the thirteenth, fourteenth, and fifteenth centuries were not only the greatest architects of the day, but they

were also the greatest painters and sculptors, and he did not think it could be doubted by any one who paid close attention to the arts generally in Italy in that great time that the value and the extreme beauty of the creations of that day must be attributable to a certain extent to the wide knowledge of these men in the various branches of art. He therefore thought—and he felt sure they would agree with him—that the nearer they could bring together painting and architecture, sculpture and architecture, the more likely were they to produce great and lasting monuments of art. A valuable suggestion which was made in the paper was as to the opportunity that there should be for testing new ideas or materials that were brought to one's notice. While Mr. Wilson was speaking he (the speaker) thought of an instance he might mention. Within the last few years what was called non-inflammable wood had been brought to the public notice. The name of that material had a very attractive sound to the public who desired to protect their buildings as far as possible from fire, but in one case he knew of, where the material was used as a casing for electric-light wires—just the very opportunity, it seemed, to make use of that material instead of ordinary wood—the chemical process to which the wood was subjected had the effect of eating away the insulation, so that the troubles with that non-inflammable wood were far greater than with ordinary wood. That illustration seemed to show of what value to architects and others testing facilities would be—especially to the ignorant amateur who insisted upon certain untried materials being used.

Mr. Francis Hooper, in proposing a vote of thanks to Mr. Wilson, said the paper was essentially a practical one for students. In reference to what Mr. Wilson had said about testing materials, &c., Mr. Wilson hardly seemed to realise what this involved when the work was undertaken, as in the case of the recent brickwork tests, by busy men who could ill afford the time necessary for the purpose. The testing of brickwork and its strength in cement or mortar in varying proportions were inquiries which were of common interest, and which had nothing to do with any manufacture or trade; but the scope of Mr. Wilson's suggestions covered an inquiry into the value or the reverse of manufactures, and touched very closely on matters with which architects were obliged to be, to some extent, independent onlookers. It had been constantly urged on the Science Committee of the Institute that they should report on the value of one thing and another, but that involved a great difficulty, which he fully appreciated. Manufacturers would look for a certificate, and a guarantee from the testing body would be a matter involving responsibility which very few would be willing to undertake. On the other hand, one advantage of joining an Association like theirs or the Institute was that members wanting information could consult another who had, perhaps, been making experiments or tests, and owing to the friendliness between members, that information would be readily given. This, to some extent, met the suggestions made by Mr. Wilson; but it also occurred to him, in regard to strength and durability of materials and chemical constituents, that it would be of great value not only to the profession, but also to the manufacturers themselves, if some basis of information could be formulated, put in such a way that materials could be compared, and the advantages of any particular material or appliance could be readily seen. This seemed a better method than for the Institute to make investigations, especially as there already exist a National Physical Laboratory and also facilities for testing the fire resistance of materials.

Mr. John Murray, in seconding the vote of thanks, said the paper was full of new ideas and suggestions. He fully appreciated Mr. Wilson's remarks with regard to the possibility of the Institute or some body of architects testing materials and laying down some definite data for the use of architects generally. At present architects had to a large extent to base their decisions upon text-books, many of which were obsolete, as was fully proved by the Institute experiments on the subject of brickwork; and if the Institute were to inaugurate some system and spend some money on the matter, and, if necessary, get and pay some specialists to assist, a very useful result would be obtained. Nowadays architects had to consider commercialism and utilitarianism more than ever before, and it was on this basis that they must work largely in the future. They all desired to present to the public as much art in their buildings as they could, but unfortunately they had to consider the materials before the art.

Mr. W. A. Pite, in supporting the vote of thanks, said that Mr. Wilson seemed to have mentioned all the points which architects regarded as urgent, and he quite shared in Mr. Wilson's woes as to our modern needs and drawbacks. Architects were employed to build houses and other buildings, and they had to satisfy the client. An architect might build a house that would be called pleasing and beautiful by one set of people, while another set would speak of it very differently, and it seemed to him that amongst the general public the proportion of educated people who knew good architecture when they saw it, was very small. The general public seemed to think that ornament was architecture, and he remembered that some time ago a critic said of a recently erected house that the employer ought to have given his architect 1,000*l.* more for ornament than he had done. There was one point Mr. Wilson had not dealt with among the many subjects he had raised, and that was the question of architect's pay. Within the last twenty-five years the cost of buildings had very much increased, and the demands upon the architect had greatly increased without a corresponding and adequate recompense.

Mr. W. B. Gwyther said the relationship of the public to architecture in India was, so far as his experience went, quite different from what it is in this country. It was the ordinary public here that one looked to, but in India it was the public officials and the heads of departments. As to educating architects so as to satisfy the public, that was a matter in which one could be largely assisted by the leaders of the public and by the encouragement which architects received from them. That was the case in India, especially during the last four years, for Lord Curzon had taken a great interest in art and architecture. He had given a stimulus to art instead of keeping it in the background.

Mr. R. H. Weymouth said that the point raised by Lord Windsor as to the great Florentine palaces and the position of the architects in those days, made him think of the remark by Mr. Wilson that different times called for different methods. The first thing that struck one about those palaces was the absence of what could be called modern intricate planning. It was the intricacy of modern planning which so greatly increased the difficulty of the architect in dealing with his building. The magnificent palaces in Florence had large rooms, one leading from the other in the simplest manner possible, and the planning lent itself admirably to those fine, dignified monumental buildings. Modern architects had to put passages, &c., and perhaps ten rooms in the space of one of the rooms in those palaces, and it was obvious that in such a matter as fenestration there were many intricate matters that the old Florentines never had to face, and to emulate them in their work was almost impossible. Their Chairman knew as well as any one how difficult it was to plan big modern buildings of a public character, and no doubt he would be able to tell them how difficult it was to get the grand effects of those old buildings in our modern ones. They would all agree as to the monotony of modern suburbia, but it would be difficult to teach the public much on the matter: it was a House of Commons matter—a matter relating to the land. Public bodies ought to have some control of the land round their cities so as to prevent the haphazard growth of streets and houses that was to be seen all round London, for instance; and towns should grow on reasonable lines, as Wren planned that London should grow after the great fire. We are now painfully trying to get wider thoroughfares from St. Paul's to Westminster, thereby doing, but at an enormous cost, what Wren had planned to do. It would be a fine thing if round every city there could be certain dignified lines on which the city could extend, and if that were arranged for it would do much for suburban life. He agreed with what Mr. Murray had said as to the Institute tests. He did not suppose that Mr. Wilson meant that they should be carried out gratuitously; surely the men who conducted the tests should be remunerated, and if the Institute lead the way in this matter more, it would improve its position in the eyes of the public and of its own members. He was glad that Mr. Wilson referred to the question of chemistry, and had said that it should be given more prominence in the education of an architect, for that was unquestionably desirable. He wondered whether, when the Association moved to the new premises in Tufton-street, provision would be made for a laboratory? As to the testing of materials, there were two or three bodies which might work together to do that better than even the Institute. Surely if King's College, University College, and some of the other bodies which taught architecture were to club together they might do such work well. At University College there seemed to be plenty of room for the purpose, and he did not see why some such body should not be urged to take up this work. He agreed with Mr. Wilson that it would be a great boon if architects, in their difficulties with Local Authorities, had the Institute at their back. Why should architects be unjustly dealt with even to the extent of two or three pounds, when, generally speaking, an official letter from the Institute, if that body were to act in its proper capacity, would cause the Local Authority to act with fairness? A reasonably-stated letter coming from the Institute would have great influence, and would save architects and their clients (especially young architects), from worry and injustice. Why, even the Association might do something to this end. They had a President and a Committee, and something might perhaps be thus done for the younger men of the profession.

Mr. A. E. Munby said it was quite essential for any one dealing with problems connected with heating and ventilation, and especially electric lighting, to have some knowledge of chemistry and physics, and he did not see how they could properly do such work without that knowledge. Clients nowadays undoubtedly demanded more from their architect than they did formerly, and it was only the other day that a gentleman was complaining to him of the practice of a member of the profession of allowing a trade specialist to make his own specification. In the case of electric lighting and heating the practice was not unknown of allowing a firm of good standing to tender and at the same time to prepare a specification, which was, perhaps, accepted as it stood, the architect often not knowing whether the specification was a good one or not. That was a bad practice, as it also was for an architect to take a commission on work with which he had but a superficial connexion. He did not mean to suggest that a superficial treatment of these branches was the usual professional practice, but merely raised the point as a plea for some training in pure science which would make a thorough supervision of such work an easy matter for everyone. He saw the specification of an architect recently, in which it was stated that the zinc canopy over a doorway was to be copper-nailed, which showed that that architect did not realise what would be the action of rain on the copper nails and the zinc. They were fortunate in having a gentleman of Mr. Wilson's proved artistic ability to come and address them on such subjects as were dealt with in his paper. Very often people who advocated the development of the practical side of architectural work were said to have no soul for art at all, but that could not be said of Mr. Wilson. The question of the strength, &c., of materials was one as to which all architects must necessarily take some interest, but he did not see why the expense of testing need be an important item. If there were a testing institution and organised museum and information bureau in a central position recognised by the profession they might expect that all trades connected with building would be only too glad to pay something for the tests which would be made on their materials, especially if they got a certificate. He saw the difficulty as to granting a certificate, but it might be necessary to do so. Reference had been made to the National Physical Laboratory at Bushey Park. Through the courtesy of the Director, Dr. Glazebrook, the speaker had had an opportunity of seeing the laboratory. The major part of the work there dealt with pure science, but there was a department which dealt with tests of materials. The instruments there at present for testing materials were not very extensive, but the rooms were large and the authorities were prepared to make additions to those instruments if they received encouragement and support. The institution was partially Government supported, and tests could be carried out for quite reasonable sums. He hoped, however, that the architectural pro-

fession would take up the whole question and provide a testing institution of its own.

The Chairman, in putting the vote of thanks to the meeting, said that the paper, and the general course of the discussion on it, had taken a line which he had not, judging from the title of the paper, anticipated. He had supposed that the general line would be more in regard to the attitude of the public to architecture and architects at the present time and in this country, for it was the attitude of the public to architects and their art which seemed to be of the greatest importance. In England we are labouring under great disadvantages in this respect, and he did not think there was any other civilised country in the world where there was less appreciation of art and architecture than there is in England. The public seemed to be absolutely apathetic, which was a great discouragement to architects, for they could not help, nature being what it is, valuing the appreciation of their fellow citizens. Lord Windsor referred to the period of the Renaissance in Italy. That was a period of great religious enthusiasm, and great enthusiasm in art generally, and he felt sure there would not have been the same eminence of the great masters of that time if the general public had not been inspired by a large amount of enthusiasm, which must have proved a great incentive to the great masters in their art. He thought that in this apathetic attitude which the English public took up towards art and architecture, the Press were to some extent responsible. It had been often remarked that whenever any reference was made to an architectural subject in the daily press, it was not referred to in a way which was sympathetic or which showed any appreciation of the subject, and often there was internal evidence that the writer did not know what he was writing about. Not long ago he had two gross cases brought to his notice of misrepresentation on the part of the daily press, and it seemed a great pity, considering the influence which the Press might exercise in the way of developing public appreciation of art, that they did not take advantage of their opportunity for educating public opinion. In other countries, more especially in France and Italy, the difference in the attitude of the public towards the arts was most marked. He had on repeated occasions been in foreign picture galleries, or had been looking at some notable building abroad, and had found an ordinary workman near him making most sensible remarks about the object he was looking at. It was quite a common thing in France to hear an ordinary workman criticise in the most intelligent manner a picture or building, and in a way that no one could imagine in England. No doubt our technical institutes and art schools, which had not been instituted long enough to have exercised a marked influence on the general education, would in a few generations produce a difference in this respect. He thought there were indications that the public bodies were becoming more anxious to see the buildings which they have under their care, and the improvements which they were instituting carried out in a manner more creditable than used to be the case. It was to be hoped that that tendency would develop. There was one remark in the paper which seemed to contain a suggestion for special consideration, and that was in reference to the rows and rows of workmen's cottages. Mr. Wilson suggested that they might be grouped round their own little green, and that seemed to open out an idea which would be of great advantage if followed up. One of the great difficulties was this commercialism which was at the bottom of so many things; everything must be made to pay, and that was the great obstacle. As to another part of Mr. Wilson's paper, *i.e.*, the question of materials, which certainly did not seem to bear on the subject of architecture and the public, it seemed to be quite a domestic affair for architects themselves—whether they were or were not going to use these new materials—but it opened out a wide field for discussion. As to whether the Institute should take up the question of testing new materials, as a member of the Institute council he must say that he foresaw considerable difficulty in the way of doing that. The recent tests in brickwork had been referred to; well, he had heard that the value of those tests and the accuracy of them had been very much questioned, though he did not know whether that was right or wrong. It seemed to him that, in the architect's profession the true test of any material was in the building. The test of new materials carried out in the workshop or laboratory would not be the same as that which was afforded in the actual building; the point mentioned by Lord Windsor about the non-inflammable wood for electric wire casing was an illustration of that. Still, tests were valuable, and there must be some basis to go upon. His experience was that when new materials were introduced by manufacturers, those manufacturers were always willing to give a guarantee, and were willing to let the architect use the material in a small way in his building without payment and experiment with it in that way. He had found it advisable to use new materials in that way, so that if he had occasion to use such material at his client's expense there would not be much risk.

The vote of thanks having been heartily agreed to,

Mr. Wilson, in reply, said that Lord Windsor had made a valuable remark in suggesting that architects ought not to narrow the scope of their work—in the way of design or art, he supposed. [Lord Windsor: Hear, hear.] That was one of the difficulties he had tried to deal with in his paper. The demands on the practical side of the architect's work were getting very great, and the architect had not the scope for the art side which he used to have; and if the public continued to make these demands he did not see how they were to have both art and fully-developed scientific knowledge unless they employed two men as architects for the same work. The subject of the Italian architects was an important one. Were not those architects such great men because they seized the opportunities to adapt themselves to the great change which was then taking place? and his point was that we, as architects, should attempt to do the same. The Italian architects were giants in their way, and he did not think it was so much that they had the public appreciation as that they were able to stand out as great leaders — to an appreciative public, it was true, and that public we had not got. He suggested that architects should set about training an appreciative public. As to the question of tests, he did not mean that they should be undertaken by men in their private capacity or at their own cost. His suggestion was that the Institute ought to devote some of its funds for the purpose, and not take the unpaid time of busy men. He did not think the Institute had devoted much of its funds to the brickwork tests, for he thought they were undertaken largely as the result of private contributions. That was not what they ought to expect from the Institute, for architects ought not to have to put their hands into their poorly-supplied pockets in order to furnish tests which were to become useful to the whole body. He heard that the tests were considered to be of great value to the engineering profession, and an engineer had told him that they took those brickwork tests as the standard. Still, he did not see why the individual architect should pay for those or any tests. He did not suggest that materials should be actually tested, but he did suggest that a good deal of information as to the behaviour of materials should be collected by the Institute privately and without giving any certificate, and that it should be available to the members privately. Such information would be of great value, though there might be difficulties and even danger in getting it together and circularising it. Still, take the case of non-inflammable wood: why should not architects be asked to give their experience of the behaviour of it under certain circumstances? The name of the manufacturer of any material need not always be given, though it might be inserted in the Institute publications, perhaps, with advantage to the members. Such information would be of far more value and interest to the members of the profession than mere antiquarian knowledge. As to fire-resisting materials, he thought architects were rather following a demand than anticipating it. He was under the impression that the methods employed in fire-resisting in buildings were not at all satisfactory, that they failed again and again and that there was no such thing as a fire-resisting building. He had a complete object-lesson recently in seeing the destruction of the Paddington Repository, and he never saw anything so remarkable as the behaviour of the so-called fire-resisting materials in that building and it made him feel pessimistic as to "fire-resisting" material. Where was an architect to go for data on this important subject? It had been suggested that a great deal might be done in the use of concrete beams containing steel core bars, but there were no tests available, and he did not know what such beams would do or what they would stand under certain circumstances. Why should an architect have to rely on his own initiative in order to determine the value of these things? Mr. Pite seemed to think that the number of people who could appreciate beauty in architecture was very small. Unfortunately that was so, but it was to be hoped that the number was rapidly growing, and that architects had not quite sufficiently reckoned with the fact. There were, unfortunately, a large number of people who thought they knew what beauty was in a building, but they really mistook over-elaboration of ornament for beauty. That, again, was a question of education. He had dealt, in a way, with the question of the remuneration of the architect, though he had not mentioned that the cost of building had increased. The cost had increased, but not in proportion to the responsibilities and labours of the architect. It was a delicate matter to refer to the matter of remuneration, and he had touched on it lightly. He thought that Mr. Weymouth emphasised unduly when he discussed elaborate and simple planning. The Florentines had to deal with the conditions obtaining in their time, and we should do the same, though it must not be overlooked that the conditions were changing rapidly, and a new epoch was dawning. It was not a question of copying what the Florentines did, but of adaptability to the demands of the present age; it was his point rather, that architects had been lagging behind, had been too antiquarian, and it was quite time they woke up and realised what the demands of the age were. As to that very interesting matter, *i.e.*, the control of the land so that it would be impossible to lay out dreary suburbs, he had touched on it very lightly, because he thought it formed a subject for a separate paper. It might be possible to give suburban authorities powers—in fact, they ought to have such powers—that would prevent the laying out of an estate or a suburb in the present drastic way, *i.e.*, by simply cutting streets through an estate from end to end, and other streets parallel, resulting in those awful backs to the houses of Suburbia. He thought that the land might be equally well occupied without waste of space with the houses facing their own green square. The exigencies of the age, not only as to the working classes but also the middle classes, would create a demand for such houses. He even believed that people would have to live in communities—each family with its own little house, perhaps, but with some kind of central administration or co-operative store and kitchens, &c. He agreed with Mr. Weymouth that architects ought to be assisted a little more in questions of professional practice, and thought the members of the R.I.B.A. should be entitled to look for assistance from the council or committees when difficult questions of professional practice were involved.

New Officers.

The Chairman then read the scrutineers' report on the voting for new officers. There had been received 380 voting papers, of which ten were rejected as invalid. The following was the result:—

President.—Mr. Henry T. Hare.

Vice-Presidents. — Messrs. R. S. Balfour, Arnold Mitchell.

Committee. — Messrs. W. A. Pite, Louis Ambler, A. N. Prentice, E. Guy Dawber, W. Howard Seth-Smith, E. L. Lutyens, John Murray, J. S. Gibson, F. D. Clapham, and R. H. Weymouth.

Hon. Treasurer.—Mr. Francis Hooper.

Hon. Librarian.—Mr. J. MacLaren Ross.

Hon. Secretaries.—Messrs. H. P. G. Maule and Henry Tanner, jun.

On the motion of Mr. Francis Hooper, seconded by Mr. Louis Ambler, a vote of thanks was accorded to the scrutineers, *i.e.*, Messrs. W. J. H. Leverton, A. Potter, L. Simmons, A. S. Tayler, and T. C. Yates.

Mr. Simmons having briefly replied, the meeting terminated.

THE SOCIETY OF MINIATURE PAINTERS.—The private view of the eighth annual exhibition of the Society of Miniature Painters will take place on Saturday, the 9th inst., at the Modern Gallery, 175, Bond-street, W. The exhibition will be open to the public from the 11th to the 30th inst.

ENGINEERING SOCIETIES.

SOCIETY OF ENGINEERS.—At a meeting of the Society of Engineers held at the Royal United Service Institution, Whitehall, on the 4th inst., Mr. J. Patten Barber, President, in the chair, a paper was read on "Certain Vexatious and Fallacious Cement Tests Now in Vogue" by Mr. D. B. Butler, Vice-President. The author prefaced his remarks with the statement that although, owing to improvements in manufacture, Portland cement had become much more reliable during the past twenty years, it was still far from perfect, and therefore required careful testing before use. The object of testing cement was to ascertain its value as a constructive material, and therefore all tests which contributed useful knowledge of its properties were to be commended. On the other hand, tests which were fallacious and misleading, and needlessly hampered the manufacturer, should be at once discarded. Want of uniformity in the method of carrying out the most ordinary tests was first referred to as a cause of frequent vexation and friction. The simple matter of fineness was often in dispute owing to the different thickness of wire employed in the sieves used for testing. In England there was no agreement on this point, but in America and on the Continent the uniform standard adopted was that the thickness of the wire should be one-half the width of the opening. Examples were given of the varying results obtained with different thicknesses of wire, and the author stated that in order to bring his practice into line with the majority of the cement-using community he had abandoned the Faija standard, and adopted the American and Continental standard. The most glaring example of a vexatious and fallacious test was the "marmalade pot" test for free lime or unsoundness, in which it was assumed that the evolution of heat during setting denoted the presence of free lime. A quotation from a recent paper by the author, published by the Institution of Civil Engineers in 1898, showed the fallacy of this test. As, however, it was still being enforced in many cases, causing an immense amount of unnecessary friction between the engineer and the manufacturer, and in some instances no little expense to the latter, further examples of its misleading character were given from the author's daily practice. The results conclusively demonstrated that the rise of temperature was entirely due to the heat evolved by the crystallising action of setting, and that therefore a slow-setting cement evolved little or no heat, while a quick-setting cement might show a rise of 20 or 30 deg. and yet withstand every known test for soundness. The results further demonstrated that not only did the evolution of heat during setting not indicate free lime or unsoundness, but what was more to the point, the evolution of no heat was no guarantee of soundness, several samples which evolved no heat being utterly unsound and absolutely worthless. Nor could it be asserted that because a cement showed a rise of temperature of 15 or 20 deg. it was therefore too quick-setting for general use. Many cements did not commence to set, and therefore evolved no heat, for about fifteen or twenty minutes from the time of adding water (which was slow-setting enough for most classes of work), and then proceeded to set and crystallise rapidly, sometimes causing a rise of 20 deg. in less than as many minutes. The author therefore strongly urged that the temperature test should be discarded as a vexatious and fallacious test. While recognising the fact that special kinds of work necessitated special kinds of cement, the following standard specification was put forward as ensuring a good sound cement suitable for most classes of work, and obtainable from any first-class manufacturer :—

Standard Specification for General Purposes.

The whole of the cement shall be pure Portland cement, and shall conform to the following tests :—

Fineness of Grinding.—To be such that, when sifted through a standard sieve having fifty holes per lineal inch, there shall not be more than one-half (½ per cent.) by weight of residue ; when sifted through a sieve having seventy-six holes per lineal inch, there shall not be more than five (5 per cent.) of residue ; and when sifted through a sieve having 100 holes per lineal inch, there shall not be more than twelve (12 per cent.) of residue.

Time of Set.—A pat of neat cement gauged with the minimum of water at the normal temperature (60 deg. Fahr.), and placed on a glass or other non-porous slab, shall not commence to set in less than eight minutes, or take longer than five hours to set hard.

Soundness, or Freedom from Expansion and Contraction.—A pat submitted to moist heat and warm water in the Faija apparatus for soundness at the usual temperatures, viz., 110 deg. Fahr. and 120 deg. Fahr. respectively, shall show no cracks or signs of expansion after twenty-four hours.

Tensile Strength.—Briquettes of neat cement, gauged with the minimum of water on a non-porous bed and placed in water twenty-four hours after gauging, shall carry an average tensile strain of not less than 350 lbs. per square inch after three days, 450 lbs. after seven days, and 550 lbs. after twenty-eight days from the time of gauging.

Briquettes composed of 3 parts of standard sand to 1 part of cement, by weight, treated as above, shall carry an average tensile strain of not less than 150 lbs. per square inch at seven days, and 250 lbs. at twenty-eight days, from the time of gauging ; but no matter how much greater strength may be developed at the earlier dates, both neat and sand briquettes must develop an increase of at least 50 lbs. between each date.

ARCHITECTURAL SOCIETIES.

NORTHERN ARCHITECTURAL ASSOCIATION.—The following is the list of officers and Council for the ensuing session :—President, Mr. J. W. Taylor ; Vice-President, Mr. J. T. Cackett ; Hon. Treasurer, Mr. R. Burns Dick ; Hon. Secretary, Mr. A. B. Plummer (13, Grey-street, Newcastle-on-Tyne) ; Hon. Solicitor, Mr. H. C. Harvey ; Hon. Librarian, Mr. H. C. Charlewood ; Council, Messrs. H. G. Badenoch, H. Barnes (Hon. Local Secretary for Hartlepool), G. T. Brown (Hon. Local Secretary for Sunderland), J. Bruce, F. E. Caws, F. Clark (Hon. Local Secretary for Darlington), J. W. Donald, J. W. Dyson, M. H. Graham, H. Grieves, J. H. Morton (Hon. Local Secretary for South Shields), T. Reay, C. S. Errington, J. C. Maxwell, R. H. Morton, C. E. Oliver, and R. P. S. Twizell ; Auditors, Messrs. C. Walker and W. W. Oliver. The annual Report gives the present number of members as 203, viz., fifty-five members, seventy-five associates, seventy-three students. The Report includes a warm tribute to the memory of the late Mr. Thomas Oliver, who was one of the founders of the Association, and was for seventeen years Hon. Secretary, and four times elected President.

MANCHESTER SOCIETY OF ARCHITECTS.—At the annual general meeting of the members of this Society, held on Thursday last week, the following officers and members of the Council were elected :—President, Mr. J. W. Beaumont ; vice-presidents, Mr. John Ely and Mr. W. A. Royle ; hon. secretary and treasurer, Mr. Paul Ogden ; assistant hon. secretary, Mr. George Brown. Members of Council :—Fellows : Mr. Alfred Darbyshire, Mr. Edward Hewitt, Mr. J. D. Mould, Mr. Isaac Taylor, Mr. J. B. Gass, Mr. Jesse Horsfall, Mr. A. J. Murgatroyd, Mr. John H. Woodhouse, and Mr. P. S. Worthington ; Associates : Mr. A. E. Corbett, Mr. L. H. Dutch, and Mr. A. H. Mills.

COMPETITIONS.

LIVERPOOL CATHEDRAL SCHEME.—The time within which the five architects selected out of the first competitors were to send in plans for the Liverpool Cathedral expired on the 30th ult., and inquiry at the Church House shows that all the sets of plans have duly arrived. The competing architects are Messrs. Austin & Paley, Mr. C. A. Nicholson, Mr. G. Gilbert Scott, Mr. Malcolm Stark, and Mr. W. J. Tapper. The plans, which meanwhile remain packed and sealed, will without delay be submitted to the assessors, Mr. G. F. Bodley, R.A., and Mr. R. Norman Shaw, R.A., who will in due course submit their final report. In the interim all concerned are pledged to treat the matter as confidential. The report of the assessors may be expected a month hence.—*Liverpool Post.*

TOWN HALL, SUTTON COLDFIELD.—Mr. J. A. Cossins has reported to the General Purposes Committee of the Sutton Coldfield Town Council upon the plans submitted in competition for the erection of a new Town Hall, and the Committee will recommend the Council to make their award to Messrs. Mayston & Eddison, of Great James-street, Bedford-row, London ; and that their plan be carried out, subject to certain suggested alterations embodied in the report of the assessor. In the competition the second and third places were given to Mr. Herbert A. Hall, of the Old Park, Southgate, London, and Mr. W. F. Edwards, Colmore Chambers, Newhall-street, Birmingham. There were forty competitors, and the premiums offered were 50*l.*, 30*l.*, and 20*l.*

WESLEYAN CHURCH, SALTBURN-BY-THE-SEA.—The Trustees of the Saltburn-by-the Sea Wesleyan Church recently accepted the plans and designs of Messrs. Garside & Pennington, architects, Pontefract and Castleford, in a competition for new Wesleyan church. The church will accommodate 550 on the ground floor (no galleries being provided) and is to cost 6,000*l.*, with tower and spire. The interior is divided into nave, aisles, transepts, and chancel by white Whitby stone pillars and arches, the floor of the chancel being covered with grey and red marble. The floor of the church is wood blocks. Externally the walls are in local stone, and roofs covered with red tiles, the windows filled with leaded lights, and the whole buildings designed in a treatment of late Gothic.

TOWN HALL, HIGH WYCOMBE.—The premium of 100 guineas offered by the Corporation of High Wycombe for the best design for the proposed new Town Hall and municipal buildings to be erected in Queen Victoria-road in that borough, has been jointly awarded to Messrs. John J. Bateman, Charles E. Bateman, and Alfred Hale, of 81, Edmund-street, Birmingham. The second design in order of merit was sent by "F. H.," of 10, Cheyne-road, Chelsea ; the third by Mr. J. Edwin Forbes, 21, Waterloo-street, Birmingham ; and the fourth by Messrs. Willes & Anderson, of Adam-street, Adelphi, London.

MANCHESTER NEW INFIRMARY.—The Building Committee of the Board of Management of the Manchester Royal Infirmary are about to draw up a list of the architects who are to be invited to prepare plans for the new infirmary at Stanley-grove. A great number of applications to be included in the list have been received from architects in all parts of the country. It is proposed to select from these eight or nine architects, who will be commissioned to submit plans to the Committee, and each of the persons so selected will be paid for his drawings. On the recommendation of the President of the Royal Institute of British Architects (who was asked to suggest a name), the Committee have appointed Mr. J. J. Burnet, of Glasgow, to act as assessor.

WAVERTREE BAPTIST CHURCH AND SCHOOLS, LIVERPOOL.—This competition has been decided in favour of designs submitted under motto "New Era," the authors being Messrs. George Baines, F.R.I.B.A., and R. Palmer Baines, 5, Clement's Inn, Strand, London, W.C. The assessor was Mr. Henry Hartley, F.R.I.B.A.

BOOKS RECEIVED.

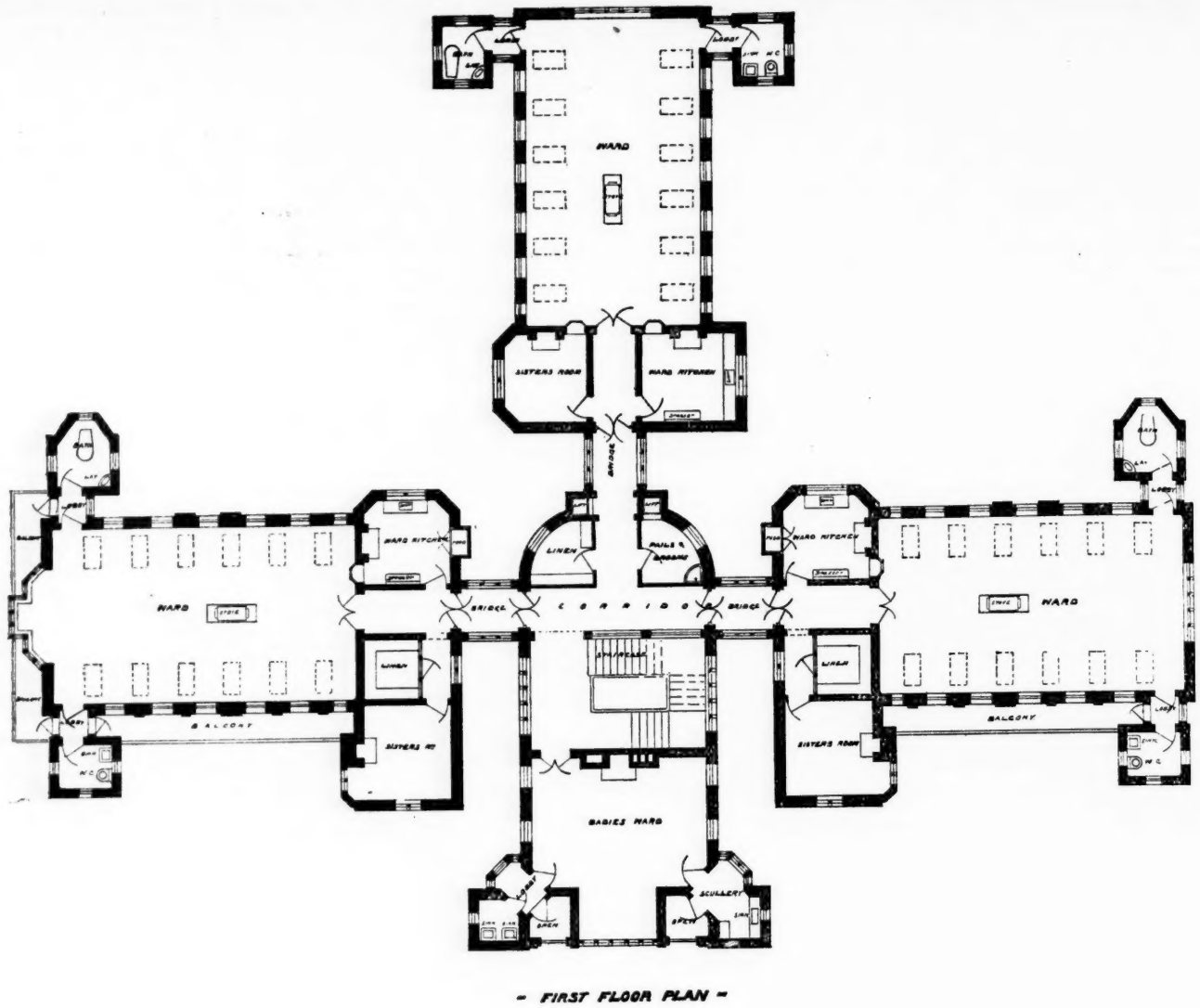
BLACKIE'S STANDARD SHILLING DICTIONARY. (Blackie & Son.)

THE ARTS IN EARLY ENGLAND. By G. Baldwin Brown, M.A. (John Murray. 32s.)

THE RESTORATION OF THE ANCIENT IRRIGATION WORKS ON THE TIGRIS. By Sir W. Willcocks, K.C.M.G., &c. (Cairo : National Printing Department.)

THE PRINCIPLES OF ARCHITECTURAL PERSPECTIVE. By G. A. T. Middleton, A.R.I.B.A. (B. T. Batsford. 2s. 6d.)

ROYAL HOSPITAL FOR WOMEN AND CHILDREN.—At the last annual meeting of the Court of Governors held on April 24, it was formally announced that after the demolition of the present hospital in Waterloo Bridge-road, a new one, to accommodate two hundred beds, would be erected upon the site, and upon some adjoining land having a frontage to Stamford-street ; of the latter ground, the Governors bought the freehold from the Duchy of Cornwall in 1881. For the main portion in Waterloo Bridge-road, which will provide for one hundred beds and the out-patients' department, the plans and designs of Messrs. Waring and Nicholson have been adopted, and a tender by Messrs. Holliday & Greenwood for 30,949*l.* has been accepted. The hospital was established on its present site eighty-one years ago. In pulling down the old buildings was discovered the foundation-stone, inscribed with a record of the founding of the charity and of the laying of the stone on July 19, 1823, by Frederick, Duke of York and Albany.



- FIRST FLOOR PLAN -

Belgrave Hospital for Children, Kennington. Plan.

Illustrations.

ENTRANCE TO SEDGWICK MUSEUM, CAMBRIDGE.

THE illustration shows the main entrance of the new Geological Museum at Cambridge, now being built, from Mr. T. G. Jackson's designs, as a memorial to the late Professor Sedgwick.

It forms part of a large group of University buildings on the north part of the old grounds of Downing College, which has been bought by the University. A law library and law schools, and ultimately an archæological museum, also from Mr. Jackson's designs, are to adjoin it. The contractor is Mr. W. Sindall, of Cambridge, and the clerk of works is Mr. Robert Edwards.

The drawing is exhibited at the Academy.

UNIVERSITY COLLEGE, SHEFFIELD.

THE site in Western Bank is about three-quarters of a mile from the centre of the city, on the ancient and broad highway leading to the West End. It is on the ridge of the hill 420 ft. above sea level, and it adjoins Westow Park on two sides. The area is 11,821 yds., nearly 2½ acres, of which 8,900 yds. were purchased for 7,000*l.*, and the remainder has been purchased by Dr. Sorby for 3,500*l.*, and given by him to the College.

The western boundary between the site and the park is to be of light iron railings, so that the building will appear as if within the park, and will be an improvement to it. The building is to be in the Tudor style of architecture, a style which has acquired a collegiate character by long use at Oxford and Cambridge. The walls are to be of brick, with stone dressing.

The general plan is of buildings surrounding a quadrangle 154 ft. by 110 ft., with an annexe for the library. The buildings on three sides of the quadrangle are to be erected immediately. The fourth side is to be erected hereafter when required, and the library as and when funds are available, and of such a design as shall then be determined.

The building on the south side of the quadrangle, and facing Western Bank, is for general and administrative purposes, and comprises the entrance hall, common rooms, refectory, offices, council-room, and the great hall, which is 100 ft. by 40 ft., is to have windows upon all sides, with dressed stone walls, oak dado, and oak open-timbered roof. The hall is also the principal feature of the Western Bank front.

The building on the west side of the quadrangle, and with a front to the park, is for the arts and science departments, comprising arts, physics, biology, and chemistry.

The building on the north side of the quadrangle, and also with a front to the park, is for the medical department, comprising anatomy, physiology, pathology, bacteriology, public health, and also medical library and lecture rooms.

The internal finish of the building is dependent upon the amount of subscriptions, but it is intended that in addition to finishing the entrance, the great hall, and the council-room in dressed stone and oak, the corridors and laboratories shall have salt glazed brick dados, and the corridor have buff-coloured facing bricks above the dados. The estimated cost of the buildings, exclusive of the library, is 67,500*l.*, and the library, if erected as designed, will cost 7,500*l.* Messrs. Gibbs & Flockton are the architects.

The drawing is exhibited at the Academy.

BELGRAVE HOSPITAL FOR CHILDREN, KENNINGTON.

THIS building is built externally in red brick with Portland stone dressings and with red tile roofs.

Internally the large walls have a tile dado 5 ft. high, with enamel painted plaster above. The floors are of teak blocks. The babies' wards has the whole of the walls tiled and painted with pictures. The bathrooms, &c., are all white tiled. The hall has a marble dado and marble floor.

The main staircase is of teak the whole height of the building, and is cut out of the solid, each step being 13 in. by 6 in., thus forming an excellent fireproof staircase, and doing away with any boxing-in casing. This principle has been followed throughout the building, everything being solid, and all pipes exposed, and well away from the surface of the walls.

The buildings have been carried out by Messrs. Gough & Co., of Hendon, Mr. G. Gathercole acting as clerk of works. Mr. H. Percy Adams is the architect.

The predominating tone of the exterior, as will be gathered from the above description, is red; but the rather loaded character of the original drawing made it look very heavy and sombre in a lithograph of a reddish brown tone, and we thought it better to adopt a light grey tone in printing, to get rid of this effect.

"THE GALTRES," EASINGWOLD, YORKSHIRE.

THE house here illustrated was planned in its irregular shape so as to get a good aspect and the best views, and in order that a previous house could be left standiug while the new one was built.

The materials are hand-made bricks, and red tiles for the roofs.

Mr. Ullathorne, of Selby, was the builder. The architects are Messrs. Demaine & Brierley, of York.

INTERNATIONAL FIRE EXHIBITION.

THE International Fire Exhibition was opened at Earl's Court, on Wednesday, by the Duke of Cambridge, K.G. As our readers are aware, the exhibition has been organised by the British Fire Prevention Committee, and a large collection of fire appliances and exhibits, more or less relating to the question of fire and fire prevention, have been brought together.

After the Duke of Cambridge had driven through the grounds, he attended a luncheon in the Quadrant Restaurant, at which Mr. Cremieu-Javal presided. Among those present were Rear-Admiral FitzGeorge, the Duke of Marlborough, Sir George Birdwood, Admiral Sir E. Fremantle, Sir John Furley, Lieut.-Colonel Fox, Count Kamarowski (Russia), Sir N. Kennett-Barrington, Mr. E. O. Sachs, and others.

After the loyal toasts, the Duke of Cambridge proposed "Success to the International Fire Exhibition." He said he hoped the Exhibition would be a great success, not only in that place, but as far as the whole country was concerned. He fancied, from what he had been told, that fire prevention and extinction had not been considered with a view to the advantage of the whole community, which might have been the case, and he hoped that that Exhibition would have great effect.

The Duke of Marlborough, President of the National Fire Brigades' Union, responded, and said he was glad to see present so many gentlemen from foreign countries and from various parts of the United Kingdom. On behalf of the Union, he thanked the Chairman and Committee of the Exhibition for their assistance. There were representatives from every country in the world, from every Metropolitan borough, and from insurance and other societies concerned in protecting the community from fire. He was only sorry that there was no representative there that day from the London County Council, and that no appliances had been sent by that body. All Londoners were interested in knowing what were the latest appliances possessed by their Fire Brigade, and it would have been a pleasure to all connected with that Exhibition to have some of the County Council's fire appliances on view.

Mr. E. O. Sachs, Chairman of the British Fire Prevention Committee, also responded to the toast, and spoke of the success of the exhibition as being assured, because it was at once amusing, interesting, and instructive.

The Chairman then proposed "Our Foreign Fire Visitors," stating that there were exhibits from Russia, France, Germany, Sweden, Italy, Austria, Belgium, Switzerland, and the United States, and that many towns in this country had sent the chief officer of their brigades to attend the opening ceremony. There were representatives from Berlin, Hamburg, St. Petersburg, Bremen, Ghent, the French Fire Brigades' Federation, &c.

Count Kamarowski, President of the International Fire Brigades' Council, Russia, and Chief Officer Westphalen, Vice-President of the International Fire Brigades' Council, Hamburg, responded.

The foreign representatives were then introduced to the Duke of Cambridge.

THE LONDON COUNTY COUNCIL.

THE first meeting of the London County Council after the Easter recess was held on Tuesday in the County Hall, Spring-gardens, Lord Monkswell, Chairman, presiding.

Loans.—On the recommendation of the Finance Committee, it was agreed to lend St. Pancras Borough Council 989*l.* for street lighting and 20,000*l.* for electric lighting purposes; Woolwich Borough Council 2,004*l.* for site for new offices; Shoreditch Borough Council 770*l.* and Kensington Borough Council 27,500*l.* for street improvements; Fulham Guardians 2,525*l.* for purchase of land; Stepney Borough Council 10,000*l.* for electric lighting works; Camberwell Borough Council 10,000*l.* for baths and wash-houses; Woolwich Borough Council 16,000*l.* for erection of offices; and Wandsworth Borough Council 3,660*l.* for public baths. Also sanction to the following loans: Finsbury Borough Council 680*l.* for street lighting; and Westminster City Council 730*l.* for street improvement.

Avery Hill.—The Parks and Open Spaces Committee reported as follows:—

"In compliance with the instruction given by the Council on November 18, 1902, we have considered to what purposes the Avery Hill estate at Eltham should be devoted. The area of the estate is rather more than 84 acres, and is enclosed by walls and fences. The grounds are laid out as to a part near the mansion as gardens, and as to the remainder as a park, a portion being enclosed for use as paddocks in connexion with some extensive stabling. The buildings consist of the mansion, with winter garden and conservatories adjoining, a machinery house, stables, stud farm buildings, and an outlying building, and there are two lodges. We recommended the Council in July last to purchase the property for the purpose of a public open space, and this recommendation was adopted with the addition of an amendment reserving the right to devote the property to such other purpose as the Council could legally determine upon. As the result of a very careful consideration of the Council's instruction, we have come to the conclusion that the land (except a small portion referred to in a later part of this Report) together with the winter garden, the conservatories, and some rooms on the ground floor of the mansion should be devoted to the purposes of public recreation. The land and the gardens are already laid out, and the winter garden, fernery, and fruit houses completely furnished, and could be opened for public use at once. We are of opinion that the ballroom, with the annexe adjoining, the sculpture gallery, and the drawing-room, all of which communicate with the conservatories, should be retained as shelters and refreshment-rooms. The rest of the mansion might, we think, be used as a convalescent home; and, should the Council adopt our view, we propose to communicate with hospital authorities and ascertain whether they would desire to occupy it temporarily for that purpose. In the event of our proposal being adopted by the Council, we should enclose the part of the garden which is to the north of the mansion for exclusive use in connexion with the convalescent home. This could easily be done by means of hurdles and gates, still allowing the public access to the park by the two lodge entrances. The convalescents would, equally with the general public, have free use of the whole of the land. The machinery-house should be retained. It is fitted with electric-light machinery to supply light to the mansion, and with boilers for supplying heat to the conservatories and the mansion. We are not prepared at present to make any suggestion with regard to the stabling near the house or on the stud farm, but the outlying building we should propose to convert into a public shelter."

The Committee recommended accordingly, and, after a long discussion, their recommendation was agreed to.

Golder's Hill.—The same Committee recommended as follows in regard to the mansion at Golder's Hill:—

"That the annexe at the northern end of the mansion at Golder's Hill be utilised for the purposes of public conveniences; the upper part being reserved for women and children, and the lower part for men; and that the Architect do prepare the necessary plans accordingly.

That the rooms on the first and second floors of the northern wing of the mansion at Golder's Hill be allocated as a residence for the park superintendent; that the Architect do prepare plans showing the necessary alterations, including the provision of a separate entrance from the front of the house.

That the whole of the ground floor and the kitchen, &c., of the mansion at Golder's Hill be devoted to the purpose of a public refreshment place.

That the basement of the mansion at Golder's Hill be used as a store."

The recommendations were agreed to after discussion.

Municipal Brickmaking.—The Housing Committee reported on the result of the brickmaking on the Norbury Estate, and stated that, though it was not possible at this stage to finally close the accounts for the first season, it appeared to them there should be a sufficient margin to meet all contingencies and to show a saving as the result of the Council's brickmaking operations in connexion with the Norbury Estate. The number of clamp-burnt stock bricks made was 2,941,000, and the average cost was 23*s.* 9*d.* per 1,000. Assuming that the proportion of waste (11·76 per cent. of those examined) was maintained throughout the clamp, and that the waste was valueless, the average cost of bricks, they estimated, would be 26*s.* 11*d.* per 1,000, and, with certain additions, the total cost was 29*s.* 7*d.* With regard to the quality of the bricks, they stated that the last season was very unfavourable for sun-dried and clamp-burnt bricks. The frequent rain and generally dull and damp weather delayed the drying of the bricks beyond the time usually required for that operation. The new clamp had to be burnt in a position which had not been previously occupied by a clamp, and the moisture rising from the ground has consequently increased the number of underburnt bricks in the lower portion of the clamp. Moreover, the field was idle for twelve months before the Council commenced operations, and the preliminary preparation for the resumption of work entailed a considerable amount of labour and expense which will not occur again. Concurrently with the making of clamp-burnt stock bricks they had also made red bricks, which are burnt in a kiln. The burning of the kiln is now completed, and the number of bricks manufactured is 85,000, at a cost of 39*s.* 10*d.* per 1,000. These have not yet been sorted, and it is undesirable to incur expense in doing this until they are required for use in the cottages. It is not anticipated, however, that the percentage of waste will be large. They recommended that a further expenditure of 2,500*l.* be sanctioned in respect of brickmaking.

Mr. E. White said the Report was most meagre; but he suggested that there was an actual loss of something over 5*s.* per 1,000 on the bricks turned out. It was another illustration of the fact that a body like the Council could not enter on a business of that kind, and compete with a manufacturer experienced in the business. The Council was induced to reject a tender of 28*s.* per 1,000 for bricks on the assurance that the Housing Committee could make them cheaper on the spot. As a matter of fact, the cost had come out at 32*s.* 6*d.* per 1,000, with a large proportion of waste bricks. This season was likely to be worse than last for brickmaking.

Mr. Bruce said it was better to turn the clay on the estate into bricks than to pay for the cost of carting it away. There was a mound on the estate, and that had to be moved in any case, and it seemed a good plan to make bricks of it, especially as there was brick-making machinery on the site.

Sir J. McDougall endorsed this statement. He admitted that the bricks were a little dear, but they were getting bricks 6*s.* per 1,000 cheaper, including cartage, than they could buy them.

Mr. Goodman said that last year was a very bad year for brickmaking, and Mr. White knew that the first year in such operations was always more costly, especially when they had to put up new plant.

Earl Carrington said they had made 2,900,000 bricks, which had cost 3*l.* 8*s.* 7*d.* per 1,000. If they had bought them it would have cost them 37*s.* per thousand, as they would have to pay 5*s.* for cartage.

The Report was agreed to.

Housing.—The Housing of the Working Classes Committee reported as follows:—

"We have to report that the first group of cottages on section A of the Totterdown-fields estate, Tooting, will shortly be completed and ready for occupation. This group consists of seven rows of cottages, comprising thirty-six self-contained cottages, and sixty-four self-contained cottage flats, providing accommodation as follows:—

Class of cottage.	No. of cottages.	No. of rooms.	No. of persons provided for.	Situation of cottages.
First ..	2	5 and scullery.....	20	Ruislip-street.
Second	10	4 and kitchen ...	32	do.
		3 and kitchen	36	
Third ..	24	3 and scullery.....	144	do.
Fourth	32	2 and kitchen on ground floor....	128	Cowick-road.
		3 and scullery on first floor	192	
	68		552	

In connexion with the completion of the first group of cottages on section A of the Totterdown-fields estate, Tooting, we desire to inform the Council of the arrangements that have been made for the lighting of the cottages on this section of the estate. . . . . Negotiations were entered into with the County of London and Brush Provincial Electric Lighting Co. with a view to the supply of electric light to the cottages. In the result the company have undertaken to wire and fit up the 276 cottages on section A of the estate, and to supply electric light therein on the automatic pre-payment system at the rate of 1*d.* for six hours' eight-candle power light. The company have also undertaken to keep the lamps and wires in proper order.

On April 7, 1903, the Council referred to us the following tenders for the construction of wooden cubicle partitions on the second, third, fourth, and

fifth floors at the Mill-lane lodging-house Deptford :—

—	Amount of tenders for		Time required for completion.
	Pine panels.	Bass wood panels.	
	£	£	
Mr. H. L. Holloway..	3,700	3,900	3 months.
General Builders, Ltd.	3,997	4,278	Do.
	4,497	4,778	2 months.
Messrs. Stimpson & Co.	4,350	4,080	3 months with 6 months' maintenance.
Messrs. Spencer, Santo, & Co., Ltd.	4,577	4,577	—
Messrs. Fred. Sage & Co.	6,524	6,524	—

The architect's estimate for the partitions with pine panels amounted to 3,720*l.*

On April 7, 1903, the Council authorised our Chairman to accept the lowest satisfactory tender, and directed that the seal of the Council should be affixed to the tender so accepted. In pursuance of this authority our Chairman has accepted the tender amounting to 3,700*l.*, of Mr. H. L. Holloway for the construction of the partitions with pine panels, and the work is now in hand.

The Council on March 4, 1902, approved sketch plan No. 2 of the dwellings proposed to be erected by Viscount Portman under the London (Nightingale-street, St. Marylebone) Improvement Scheme, 1899, subject to the living and bed rooms being in no case less than the Council's minima of 144 and 96 sq. ft. respectively, and subject to any approval necessary under the London Building Acts being subsequently obtained. This plan showed accommodation for 630 persons in 40 tenements of one room, 100 tenements of two rooms and 25 tenements of three rooms. Plans on a larger scale showing a compliance with the Council's condition as to the size of rooms were then prepared and forwarded to the Secretary of State for his approval. Considerable correspondence has ensued, since the Secretary of State first required that Nos. 36, Nightingale-street and 8, Samford-street adjoining should be acquired by Lord Portman and pulled down, and that direct access should be provided to the playground in Nightingale-street from all the proposed blocks of dwellings. We have now to report that the Secretary of State has approved the plans subject to one of the following alternatives being adopted—(*a*) Lord Portman to acquire and demolish No. 36, Nightingale-street or (*b*) one room at the north-east corner of the block of dwellings to front Samford-street to be omitted through all five stories of the building. The adoption of the former alternative depends on the ability of Lord Portman to acquire the leasehold interests in the premises, and if this be done the plans as approved by the Council will be unaltered. If, however, alternative (*b*) be adopted the accommodation to be provided in the dwellings will be reduced. In this case there will be accommodation for 620 persons in forty tenements of one room; ninety tenements of two rooms, and thirty tenements of three rooms. Meanwhile, the erection of the buildings is being proceeded with pending the decision as to the alternative to be ultimately adopted."

Road Widening.—It was agreed to contribute 1,617*l.* towards the cost of widening Putney Bridge-road at its junction with High-street, Wandsworth.

District Surveyors.—The Building Act Committee reported as follows, the recommendations being agreed to :—

"The Council, on March 17, 1903, resolved that a new district of Kensington should be formed, with its boundaries co-terminous with those of the Royal Borough of Kensington, and, in order to give effect to this resolution, that the Queen's Park ward of the borough of Paddington and the late detached portion of St. George, Hanover-square, on the north side of Bayswater-road, should be added to the district of Paddington during the Council's pleasure, and that the portions of the parishes of St. Margaret and St. John the Evangelist, Westminster, north and south of Kensington Gore and Knightsbridge, should be added to the district of St. George, Hanover-square, north. Mr. Meeson, the district surveyor for Paddington, declines, however, to accept any additions to his district, subject to the condition that they shall be added during the Council's pleasure. We therefore recommend—(*a*) That the resolution of the Council of March 17, 1903, relative to the alterations necessary to the districts of Paddington and St. George, Hanover-square, north, consequent on the formation of the new district of Kensington, be rescinded. (*b*) That the portions of the parishes of St. Margaret and St. John the Evangelist, Westminster, north and south of Kensington Gore and Knightsbridge, be added to the district of St. George, Hanover-square, North."

Great Northern, Piccadilly, and Brompton Railway.—On the recommendation of the same Committee it was agreed that the Council do approve the plans in regard to the stations to be erected at Russell-square, King's Cross, York-road, Caledonian-road, Holloway-road, and Finsbury Park, submitted by the Engineer of the Great Northern, Piccadilly, and Brompton Railway Co., so far as relates to the lines to which it is proposed to build the stations.

Procedure in Regard to Dangerous Structures.—The same Committee also brought up the following Report :—

"At the hearing of a summons which had been taken out against the owner of No. 12, Old Ford-road, in consequence of his not having complied with the dangerous structure notice served by the Superintending Architect in respect of the premises in question, the magistrate, Mr. Mead, took objection to the Council's proceedings on the ground that there was no proof before him that the Council had authorised the proceedings. It was submitted on behalf of the Council that authority was delegated to the Superintending Architect, and the case of the London County Council *v.* Hobbis was cited in support of this contention; the magistrate, however said that the case cited was one raised on a refusal of his to make an order because there was no proof of the authority of the Council, but that in the present case there was no proof that the Council had authorised the issue of the notice or that the Superintending Architect had ever seen it; and, further, that the Act under which the Council worked required that the matter should go before the Council.

It appears that during the period between October 1, 1869, when the control of dangerous structures was transferred from the Metropolitan Police to the Metropolitan Board of Works, and February 5, 1890, all notices were signed by the Superintending Architect, but on the latter date the then Superintending Architect asked if he could be relieved of the duty, as signing about 3,000 notices in the course of a year took up a considerable amount of time. Counsel's opinion was taken on the matter and as the result the architect then signed the notices by means of a stamped signature, but it afterwards became the practice for the notices to be signed with his stamped signature in the Dangerous Structure section of the department, and this practice has obtained during the last ten years. In consequence of Mr. Mead's objections, however, we have thought it well to take counsel's opinion as to procedure that should be followed, and as a result we recommend that the Council do pass the following resolutions :—(*a*) That Mr. William Edward Riley, the superintending architect, and Mr. John Briggs, the chief assistant-architect, be respectively authorised to take all such steps as have hitherto been taken by the superintending architect to carry into execution the provisions of Part IX. of the London Building Act, 1894, relating to dangerous structures, including the requirement of a survey under Section 103, the securing of structures, and the giving of notice under Section 106, the enforcing compliance with such notice under Section 107, and the initiation of proceedings under Sections 108 and 114. (*b*) That in the absence of both the said William Edward Riley and John Briggs, the like authority be exercised by Mr. Frank Sizer Capon, one of the assistant architects."

The recommendations were agreed to.

Theatres, &c.—The following proposals were agreed to, *i.e.* :—

Alterations to the Cabin, 352-3, Strand (Mr. J. Murray).

Alterations to the proscenium wall on the prompt side, Drury-lane, Theatre (Mr. P. E. Pilditch).

Method of fixing a fire-resisting curtain, Eastern Empire (Mr. B. Crewe).

Method of fixing a fire-resisting curtain, Egyptian Hall (Mr. J. G. Buckle).

Method of fixing a fire-resisting curtain, Foresters' Music Hall (Mr. B. Crewe).

Arrangements in regard to the Fire and Life Saving Demonstration at the Empress Theatre (Mr. A. O. Collard for the London Exhibitions, Ltd.).

Method of fixing fire-resisting curtain, Palace Theatre of Varieties, Cambridge-circus (Messrs. Merryweather).

Alteration to sides of the circle at the Shepherd's-bush Empire (Mr. F. Matcham).

The Council adjourned soon after seven o'clock.

SOUTHWARK BRIDGE.—It is stated that the Bridge House Estates Committee of the City Corporation have under consideration a proposal for improving Southwark Bridge. Owing to the steep incline on the City side, the bridge is not much used by heavy vehicles, and many propositions have been made in the past for reducing the gradient. One of the schemes considered by the Corporation was the building of a viaduct, which it was intended should span Upper Thames-street, but the idea was abandoned. The new proposal will, it is believed, practically involve the rebuilding of Southwark Bridge.

APPLICATIONS UNDER THE 1894 BUILDING ACT.

THE London County Council at their meeting on Tuesday dealt with the following applications under the London Building Act, 1894. The names of applicants are given between parentheses :—

Marylebone, West.—A modification of the provisions of Section 41 of the Act with regard to the proposed erection of residential flats on the north side of Marylebone-road and west side of Lissongrove, St. Marylebone (Messrs. Gordon & Gunton).—Refused.

Lewisham.—That the seal of the Council be affixed to the undertaking to be entered into by Mr. A. Cameron Corbett, M.P., in accordance with an order of the Tribunal of Appeal in the case of the formation of a new street to lead out of the west side of Torridon-road, Lewisham.—Agreed.

Hackney.—That the seal of the Council be affixed to a deed of covenant (when ready) to be entered into by Mr. J. Watt in regard to the use of certain land situated at Mabley-street, Hackney, and that, upon the execution and exchange of such deed, the solicitor do withdraw the appeal now pending in the High Court.—Agreed.

Lines of Frontage and Projections.

Greenwich.—Buildings on the Page Estate on the north side of Woolwich-road, Greenwich, eastward of Chilver-street (Mr. W. J. Kemp for Mr. C. H. Polhill).—Consent.

Lewisham,†—Retention of a greenhouse in the garden of Hyndford House, Inglemere-road, Forest Hill, Lewisham, abutting upon Brampton-road (Mr. R. E. Crossland for Mr. J. J. Platts).—Consent.

Paddington, South.—A portico at the entrance of No. 6, Westbourne Park-road, Paddington (Mr. H. Boyer).—Consent.

St. George, Hanover-square.—Three oriel windows at the second and third floor levels of No. 5, Stafford-street, Bond-street, St. George, Hanover-square (Mr. R. J. Worley for Messrs. Robinson & Fisher.—Consent.

St. Pancras, South.—The retention of balconies, at the second-floor level, in front of the Marlboro' Arms public house, abutting upon Francis-street and Huntley-street, St. Pancras (Messrs. Rolfe & Matthews for Mr. M. Bromet).—Consent.

Clapham.—A wooden bay-window at the first-floor level of Chase Lodge, No. 27, North-side, Clapham Common, Clapham (Mr. S. Pocock).—Consent.

Hampstead.—An iron and glass hood over the entrance to No. 85, Greencroft-gardens, Hampstead (Mr. J. D. Hunter for Mr. A. Edlesham).—Consent.

Lewisham.—Two brick, stone, and tile porches at the entrances to two semi-detached houses on the east side of Baring-road, Lewisham, southward of Heather-road (Mr. A. Durbin).—Consent.

Lewisham.—A porch in front of No. 7, Oakcroft-road, Blackheath (Mr. L. V. Hunt for Mr. H. F. Billinghurst).—Consent.

Poplar.—That the application of Messrs. Owen & Ward for an extension of the periods within which the erection of a theatre building on the north side of East India Dock-road, Poplar, abutting upon Stainsby-road and Canton-street, was required to be commenced and completed, be granted.—Agreed.

Fulham.—Projecting pilasters to No. 859, Fulham-road, Fulham, to abut upon Fulham-road and Munster-road (Mr. R. A. Hinds for the London and South-Western Bank, Ltd.).—Refused.

Lewisham.—The retention of a building at No. 170, Lewisham-road, Lewisham (Mr. A. Dixon for Messrs. Whitbread & Co., Ltd.).—Refused.

Strand.†—Projecting oriel windows and balcony in front of No. 170, Strand (Mr. R. J. Worley for Mr. J. S. Beale).—Refused.

Strand.†—An iron and glass shelter over the entrance to the grill-room of the Hotel Victoria, Northumberland-avenue, Strand (Messrs. Isaacs & Florence for the Directors of the Gordon Hotels, Limited).—Refused.

Wandsworth.—Four one-story shops on the east side of Streatham High-road, northward of the river Graveney (Mr. A. W. G. Harding for Mr. C. Norrington).—Refused.

Hackney, Central.—A one-story building at the rear of No. 88, Mortimer-road, Kingsland, to abut upon Englefield-road (Mr. J. S. Baker).—Refused.

Islington, East.—A one-story addition upon the forecourt of No. 112, Drayton Park, Islington (Messrs. Young & Hall for the Express Dairy Company, Limited).—Refused.

Marylebone, West.—A projecting cornice to the shop fronts of Nos. 41 and 43, Duke-street, Manchester-square, St. Marylebone (Messrs. A. E. Hughes & Son for Mr. G. Sproston).—Refused.

Norwood.—Six houses with shops on the south side of Park-road, West Dulwich, westward of New Clive-road (Mr. J. Mackay).—Refused.

Width of Way.

Marylebone, East.—A one-story addition to the stables in the grounds of North Villa, Park-road, Regent's Park (Messrs. J. Blyth & Co. for Mr. R. D. Walker).—Consent.

Greenwich.—A building on the south side of Benbow-street, Hughes-fields, Deptford (Mr. J. Webster for Messrs. May & Roberts).—Consent.

Hoxton.—Buildings, blocks Nos. 1, 2, 3, and 4, on the east side of Shepherdess-walk, Hoxton, to abut upon Nile-street, with external walls at less than the prescribed distance from the respective centres of the roadways of Underwood-row and Underwood-street (Messrs. F. Chambers & Son).—Consent.

Lewisham.—Two cottages on the northern side of Willow-walk, Rushey-green, Catford, eastward of Willow-walk mission hall (Messrs. Coad & Pamflett for Mr. G. Cowen).—Consent.

Newington, West.—A one-story building at the rear of Nos. 187 and 188, Great Dover-street, Southwark, with external walls at less than the prescribed distance from the centre of the roadway of Warren-place (Mr. G. A. Lansdown for Messrs. Johnson & Co.).—Consent.

Width of Way, Lines of Frontage, and Projections.

Lambeth, North.—An external iron staircase to Block D, Wellington Mills, Westminster Bridge-road, Lambeth, to abut upon Mead-row (Messrs. Parr & Sons for Messrs. J. Oakey & Sons).—Consent.

Islington, South.—An iron and glass shelter in front of Collin's Music Hall, Islington Green, Islington (Mr. F. Matcham for Messrs. Richards, Burney, & Co.).—Consent.

Marylebone, West.—A church hall on the north side of Upper George-street, St. Marylebone, to abut also upon Little Queen-street with projecting porches and towers (Mr. W. Flockhart for the Building Committee of the Marylebone Presbyterian Church).—Consent.

Brixton.—That the application of Mr. W. E. Hazell, for an extension of the period within which the erection of buildings on a site abutting upon Canterbury-road, Pope's-road, and Industry-street, Brixton, was required to be commenced, be granted.—Agreed.

Woolwich.—The re-erection of No. 81, Wellington-street, Woolwich, abutting upon Upper Market-street, with external walls at less than the prescribed distance from the centre of the roadway of Upper Market-street (Mr. H. P. Monckton for Lieutenant R. L. A. Ogilby.—Refused.

Brixton.—A building, with a one-story addition in front, on the site of Nos. 242-258 (even numbers only) inclusive, Ferndale-road, Brixton, to abut also upon Stockwell-avenue (Mr. W. J. Chapman for the Bon Marché, Limited.—Refused.

Kennington.—Buildings on the site of Nos. 287, 289, and 291, Wandsworth-road, Wandsworth, to abut also upon Cavendish-grove (Mr. A. E. Nightingale for Mr. D. Franklin.—Refused.

Width of Way and Construction of Building.

Southwark, West.—An open shed on the east side of Great Guildford-street, Southwark (Mr. F. D. Smith for Mr. G. Newton.—Consent,

Width of Way and Deviation from Certified Plans.

Strand.—Deviations from the plans certified by the District Surveyor, so far as relates to the proposed erection of a building on the site of Nos. 3 and 5, Glasshouse-street, Regent-street, St. James's, Westminster (Mr. J. Robinson, for Messrs. A. Oddenino & Co.).—Consent.

Space at Rear.

Whitechapel.—A modification of the provisions of Section 41 of the Act with regard to open spaces about buildings, so far as relates to the proposed erection of a building on a site on the north side of Whitechapel-road, Whitechapel, abutting upon the west side of Vallance-road (Mr. G. Pestall, for the Metropolitan District Railway Co.).—Consent.

Kensington, South.—A modification of the provisions of Section 41 of the Act with regard to open spaces about buildings, so far as relates to the proposed erection of a block of residential flats on a site on the southern side of Brompton-road and eastern side of New-street, Kensington, with an irregular open space at the rear (Mr. C. W. Stephens, for Messrs. Stuttaford & Co., Ltd.).—Consent.

Whitechapel.—A modification of the provisions of Section 41 of the Act with regard to open spaces about buildings, so far as relates to the proposed erection of two houses on the east side of Vallance-road, Whitechapel, with an open space at the rear (Mr. G. Pestall, for the Metropolitan District Railway Co.).—Consent.

Formation of Streets.

Lewisham.—That an order be issued to Messrs. D. Smith, Son, & Oakley, sanctioning the formation or laying out of new streets for carriage traffic on the Crofton Park Estate, Lewisham, to lead out of the eastern side of Crofton Park-road and also from Chudleigh-road to Blythe Hill-lane (for Mr. J. W. Webb).—Consent.

Means of Escape at the Top of High Buildings.

Chelsea.—Means of escape in case of fire, proposed to be provided in pursuance of Section 63 of the Act, on the fifth floor of a block of residential flats, on the north-west side of Basil-street, Hans-road, Brompton-road (Mr. C. W. Stephens for Harrod's Stores).—Consent.

Kensington, South.—Deviation from the drawings approved on January 20 showing the means of escape in case of fire proposed to be provided, in pursuance of Section 63 of the Act, on the sixth story of Durward House at the junction of Kensington-court and Thackeray-street, Kensington, so far as relates to alterations in the arrangement of the rooms in the northern flat, and in the position of the exit door from such flat to the flat roof (Messrs. G. H. & A. Bywaters & Sons).—Consent.

Kensington, South.—Means of escape in case of fire, proposed to be provided in pursuance of Section 63 of the Act, on the fifth floor of a building on the south side of New-street, Brompton-road (Mr. C. W. Stephens for Harrod's Stores, Ltd.).—Consent.

Strand.—Means of escape in case of fire, proposed to be provided in pursuance of Section 63 of the Act, on the fifth and sixth stories of the staircase block and the fourth story (and galleries over) of the surgical ward block, Charing Cross Hospital (Mr. A. S. Snell for the Council of Charing Cross Hospital).—Consent.

*** *The recommendations marked † are contrary to the views of the Local Authorities.*

Books.

Some Quick and Easy Methods of Calculating. By ROBERT GORDON BLAINE, M.E., A.M.Inst.C.E. Second Edition, Revised and Enlarged. London: E. & F. N. Spon. 1903.

AS the title on the outside cover implies, this useful little book is an explanation of the slide-rule. The methods of the author are so clear and logical that the reader may be excused if he experiences a little surprise that the title on the exterior differs from that on the title-page. This is only a small matter, but we think Mr. Blaine will agree with the suggestion that it constitutes an undesirable example to students of a work intended to inculcate habits of precision. After showing what can be done by ordinary arithmetical methods towards the reduction of labour in calculations, especially those involving multiplication, division, evolution, and involution, the author says that the two most important extraneous aids are logarithms and the slide-rule. Here he very usefully draws attention to the fact that these two are really modifications of the same system, and that the use of the latter cannot be properly mastered without a knowledge of the former. Those who attempt to use the slide-rule without making themselves familiar with its theoretical construction, are apt to become discouraged and to end by giving the whole thing up in despair. Hence the author prefaces his explanation of the slide-rule by a brief, but singularly lucid dissertation on logarithms. In a few words he makes clear that the logarithm of a given base number is merely another name for the "power" to which the base must be raised to give the required number, and by a simple process of reasoning he explains why the use of logarithms reduces multiplication to addition, division to subtraction, and the raising of powers or the extraction of roots to multiplication or division respectively. Coming to the slide-rule, the author directs attention to the fact that the graduations are proportional to the logarithms of the numbers engraved thereon, and that while the operator appears to be working with numbers, he is, nevertheless, actually employing logarithms for the purpose of arriving at the desired result.

Having dealt with simple arithmetical problems, Mr. Blaine goes on to show how the slide-rule may be utilised in mechanics and engineering for the computation of areas and volumes; for ascertaining the speeds of pulleys and toothed wheels, stresses, and strains in tie-bars, the strength of pipes, belts, shafts, struts, columns, beams; for calculating the head, pressure, and flow of water, and other hydraulic problems; and for various calculations connected with electrical engineering. The present edition contains much useful new matter, including a complete explanation of various methods of finding cube roots, with clear rules for dealing with the ambiguity which arises with the reversed slide. A description of Professor Perry's new form of slide-rule, and various minor additions, bring the work thoroughly up to date. To those who desire plain instruction on the subject we strongly recommend this treatise.

Newlands' Ready Reckoner, giving the Exact Lengths of Rafters and Hip-Rafters for 890 Different Span Roofs, &c. By R. W. NEWLANDS. 1902.

IN addition to a folding diagram or chart, this little book contains sixty-four pages, of which nine are blank and seven devoted to advertisements, title, &c., and the price is "*5s. nett.*" But as about half the pages are packed with figures, the book represents more labour than its size indicates. The author gives the angular measurements of the different cuts to be made in common rafters, hip and valley rafters, jack rafters, purlins, &c., for ten pitches of roofs, and also the lengths of common and hip rafters for the same pitches for spans ranging from 6 ft. to 50 ft. The figures are not always strictly accurate, some of the angles in the lists of "cuts" being nearly half a degree wrong; but they are sufficiently accurate for practical purposes, and will be of great service to the carpenter. The rule for finding the lengths of jack-rafters contains one error. The rule is thus stated:—"When five jacks are to go into opening, divide common rafter into six parts: One part gives the length of shortest jack; two parts, second jack; three parts, third jack; four parts, fourth jack; five parts, the fifth and longest jack. When, however, the common rafter does not start from angle of hip and ridge-piece, the distance it is away from angle must be added to *longest jack*. If six jacks are to go into the opening, then divide rafter into seven parts, and so on for any number of jacks." The words we have italicised are incorrect; instead of "longest jack," we should read "common rafter," and add, for the sake of clearness, "before dividing by the number of jacks *plus* one." The rule for finding the length of purlins is not clearly expressed. These, however, are small matters, and we have pleasure in recommending the book as a labour-saving work of considerable value.

Homeland Handbooks. Vol. 18. Minehead, Porlock, and Dunster, by C. E. Larter. Vol. 20. Dawlish and the Estuary of the Exe, by Beatrix F. Cresswell. Vol. 23. Kingston-on-Thames, Surbiton, &c., by Dr. W. E. St. L. Finny. Vol. 25. Evesham and Neighbourhood, by William Smith. First Editions. London: The Homeland Association. 1902.

THESE four volumes are all excellent additions to a useful series of handbooks, and deal with particularly interesting districts. The beauties of Minehead, Dunster, and the Exmoor district are well known, and, apart from its scenic attractions, it is a very rich centre architecturally. Fine churches and interesting houses abound, and particular features are the screens and other details in the former, and the plaster-work in the latter. A chapter is devoted to the picturesque ruins of the Cistercian Abbey of Cleeve, which is, like the rest of the Guide, well illustrated. Particularly charming is the group of church and almshouses at Selworthy, facing p. 32.

The Guide to Dawlish and its Neighbourhood has interesting notes and illustrations of two of the fine screens for which Devonshire churches are famous—those at Kenton and Kenn. The roodloft at Kenton is particularly fine, and well illustrated (p. 77).

There is still, in spite of the modern growth of the town, a great deal of interest in the town and neighbourhood of Kingston-on-Thames. The parish church is especially interesting, and there are still many quaint examples of domestic work, and some of the houses on a larger scale still retaining their old ironwork, one example of which is illustrated on page 21. Chapters are added on Hampton Court, and the interesting Ham House, Petersham—a fine seventeenth century building—and an illustrated appendix on local trade tokens.

The volume on Evesham and its neighbourhood is exceptionally well illustrated, and deals with a district that would be hard to excel for beauty and historical interest. Evesham is remarkably rich architecturally with interesting ruins of the abbey, a magnificent bell tower, two interesting churches of St. Lawrence and All Saints near by, and in the town a great many remains of old houses. The neighbourhood also is very rich in domestic work, notably the picturesque village of Broadway, and Chipping Campden with its quaint street and market house. A few miles west is Pershore, and the fine fragment of its Benedictine church, while dotted about are innumerable villages, all of which have something of interest to the visitor. There are several striking illustrations in this volume—

perhaps the best is a photograph of the village of Cropthorne.

The guides are all concisely and brightly written, and, although not necessarily exhaustive, enough is given to materially assist the visitor in finding out all that is of interest in the districts of which they treat.

The Ancient and Loyal City of Exeter. By BEATRIX F. CRESSWELL. London: The Homeland Association.

WE presume that the compiler of a guide-book has, like the historian, to choose between style and accuracy, and the author of this guide to Exeter has selected the former. It is brightly written, and so far the author is to be congratulated. But her disregard of facts and looseness of nomenclature are sometimes flagrant.

For instance, the statement that the nave of the pre-existing Norman cathedral ended at the present north porch—for which, we believe, Dr. Oliver, a Devonshire worthy, was in the first place responsible—has no business to be re-affirmed to-day. It is generally well-known, we should have imagined, that the bases of the Norman piers are standing now beneath the pavement, abutting on the west wall. Further, this wall is itself for the most part built of Norman masonry, to which the face-work and detail of the fourteenth century nave were afterwards affixed. Moreover, there is a thirteenth-century chapel at the north-west corner. How this came to be there, with the nave stopping three or four bays short of it, does not seem to have occurred to the writer.

Again, to speak of the great west window—a typical Decorated window with mullions—as "Bishop Grandisson's beautiful rose window" is to confuse commonly accepted terms in a most puzzling fashion.

The material of which the Norman towers are built, we may also point out, is not Beer stone, but Salcombe stone, a distinction of some interest, since the Norman masonry may be thus recognised. The Beer quarries were not called into requisition until later.

It is a mistake of minor importance, perhaps, to speak of the "fine front" of the Albert Memorial Museum, "with its polished marble facings." Yet it cannot be considered a suitable description of an axed limestone building while two granite piers at the entrance represent the only polish of which it can boast—if polish be really something to be desired.

On the whole, we cannot commend the author's choice. Some care as regards the authorities consulted, and a patient faculty of observation, are essential features of a guide-book.

The Rood Screen of Ranworth Church. By EDWARD F. STRANGE. Norwich: Jarrold & Sons; South Kensington: Lamley & Co. 1902.

THIS is a thin octavo, of 30 pages, giving a very good account of the beautiful rood screen at Ranworth—one of the most interesting of the numerous screens to be found in Norfolk. There are a few illustrations by Mr. H. P. Clifford, including a general view of the screen from the west or nave side, showing the returns or wings that helped to protect the two side altars placed against the western face. Unfortunately, a portion of the vaulted cove that supported the loft has been destroyed, but traces of its outline still remain. Of the numerous painted panels, that depicting St. George is given, and three small illustrations of the decorative detail are included. The church, which had become very ruinous, is being repaired under the superintendence of Mr. J. T. Micklethwaite, F.S.A., and the work under notice has been written to help to raise a fund for the completion of the restoration. It will be found a useful guide to a highly interesting piece of mediæval woodwork and decoration.

The Country Gentleman's Estate Book. 1903. London: The Country Gentleman's Association, Ltd. 1903.

THIS is the eleventh year of this or of similar publications. The book is an excellent compendium, containing so much material that it would be impossible to refer to all the contents. It must suffice to point out that there is to be found in it much which will be useful for those improving or changing the character of their estates by building. There is, for an instance, a most excellent little section on brick enclosure walls, which is illustrated with some little drawings, which make the text clearer for those who are not professionally concerned with buildings. We think, however, that the small illustrations placed at the end of the sections, and which are not concerned with the subject-matter of the adjoining text, might very well be omitted.

The Business Man's County Court Guide. By CHARLES JONES. Third and Revised Edition. London: Effingham Wilson. 1903.

THIS is a most useful little book, not only for the business man who wants to conduct a County Court action without the assistance of a solicitor, but also for young lawyers who may need a handy book of County Court practice. Both in material and form it is excellent. The addition of information on costs was certainly desirable, and makes the book practically complete.

Blackie's Standard Shilling Dictionary. London: Blackie & Son. 1903. 1s.

THIS is a remarkable shillings-worth, not only including a very clearly printed dictionary of general words, but also an appendix which contains special terms used in engineering, physics &c.; commonly used phrases from foreign languages, with their explanations; a list of commonly used abbreviations and contractions, forms of ceremonial address and title, principal moneys and weights and measures of the world, mathematical and other signs and symbols, and diagrams illustrating the various types of mechanical movements and applications of force. The printing of the book is everything that could be desired, for a dictionary of this scale, and it is a publication which ought to have a great success among the large class of persons who cannot afford an expensive dictionary.

Correspondence.

"ARCHITECTURE AND THE PUBLIC."

SIR,—In his able and comprehensive paper read before the Architectural Association on the 1st inst., Mr. Needham Wilson pointed out very fully what is the relationship at the present time between architects and their employers, but he did not say very much as to the attitude of the public generally towards architecture, nor did he suggest how that attitude might be improved. Several of the speakers in the discussion which followed rather took up the side issues than the main subject, and the President was almost the only one who spoke much upon the vital question.

It occurs to one that something more might have been said both by the reader of the paper and the subsequent speakers as to the real matter under consideration. It may doubtless be taken for granted that the general public do not care about architecture at all. It is certainly the fact that the majority do not realise what the functions of an architect are. Comparatively few people ever employ the services of an architect, not that there is no occasion for them to do so, but that they are too ignorant or too stupid to make use of the men who are best fitted to be of good service to them. Take the average member of the public who buys or rents a house. How often he goes to "Whiteley's" or the "Stores" respecting the drains, to the same source of supply or to a local builder as to any alterations or additions he may require, and to Maple's or some other similar emporium for any decorative work! (This is not an exaggerated fancy picture, but a matter of every-day occurrence.) How seldom he consults the proper person to advise him on all these matters, viz., an architect!

A similar instance happened quite recently in the case of a well-known West End Club, which was compelled to vacate its premises and seek a new home. On finding a building which it was thought might be made suitable for the accommodation of the club, the building being then in use for other purposes, did the committee consult an architect as to how their requirements could best be met? No. Nor did the proprietors of the building proposed to be altered do so, although they were prepared to spend several thousand pounds on altering and adapting their building to suit the club. They employed a firm of builders to make the plans, and the club committee were apparently content with this arrangement, although they were men of high standing (noblemen, Church dignitaries, retired officers, and others of good social position) and presumably of culture and intelligence, who might have been expected to know better.

One can understand to a certain extent why directors of companies care more for the paying capacity of their buildings than for the architectural appearance of them, and why they prefer to employ an architect whom they can trust to get them a good rate of interest on their capital, regardless of the architectural design, rather than one who would give them good architecture and perhaps, as they fear, rather less monetary return. Not that there is any reason why a well-designed building need be less remunerative than a badly-designed one, but the public seem to imagine that if they go in for art they must sacrifice utility, ignoring the fact that a good architect will combine both.

To give another instance. A few years ago an enlightened colliery company in Derbyshire built a model village enclosing a green, as advocated by Mr. Wilson. Architects were employed and the cottages were well designed, plain and simple, but of good proportions and details, varied and picturesque; in short—just what such buildings should be. Many other colliery villages have since sprung up within a few miles radius of that one, but has this model been imitated? No. Miles and miles of stereotyped cottages have been erected in long rows of the ugliest and most depressing monotony, just brick walls with large ill-proportioned double-hung sash windows with heavy stone lintols and sills, high, narrow door openings with similar heavy stone heads, and flat-pitched purple slated roofs, with ugly chimneys. Occasionally a row of slightly superior (?) cottages with wooden bay windows of the most shocking proportion and scale—or want of them!

No architect, surely, ever had a hand in these eyesores! And yet the cost of these can be so little less than the model village cottages, that it would seem hardly worth while to spoil whole villages and country sides for the sake of saving a trifling sum in the way of architects' fees.

Will the workmen's estates now being laid out and designed so admirably by the architects of the London County Council have the effect of inducing people to employ architects to plan the development of estates and design cottages and artisans' dwellings, or will the general public still be content to leave such matters for the most part to the tender mercies of the jerry-builder, as heretofore?

Why should not Borough and District Councils require plans submitted for their approval to be prepared by professional architects, just as the Incorporated Church Building Society and other authorities do? This surely would be in the interests not only of architects, but of the general public, who might thereby be saved much suffering in both mind and body.

Why should not the rudiments of architecture be more taught in our schools, so that the public might be led to take some intelligent interest in our art, instead of leaving it a closed book as at present, except in the case of the very few who make a special study of it?

As Mr. Hare said, the daily Press might help architecture much more than it does. Only last week at least two important buildings were opened in London, viz., the Baptist Church House and the School of Art Needlework. The daily papers gave long descriptions of the ceremonies and the buildings, but one looked in vain for the names of the architects. Surely it should be of as much general interest to know who designed a public building as to know who wrote a play or composed an important piece of music. No newspaper report omits to record these latter facts.

Mr. Wilson's comparison of architecture with music as regards their power of causing emotion seems a little inapt, as it may be doubted whether they can be fairly compared in that respect, any more than can painting and oratory, the one being essentially an emotional art and the other not. It may also be questioned whether his remarks as to "the public not employing incompetent or unqualified men as architects any more than they would an incompetent or unqualified lawyer" are, as he appears to intend them to be, an argument against registration. As matters now stand the public know that when they consult a lawyer they are employing a competent qualified man, but at present they have no such guarantee as regards an architect, nor will they have in the future unless some test of qualificatfon be made obligatory.

Mr. Wilson's view of the whole matter seems very pessimistic, but there is another side to the picture, and there are good clients as well as bad and indifferent ones. Many clients thoroughly appreciate our services, and an employer who took a great interest in his building during its progress said recently to his architect, "I must say that you architects do earn your fees. I had no idea you did so much work for the five per cent."

This sort of speech is as gratifying as the "letter of grateful thanks with the final cheque" which perhaps is not quite so rare as Mr. Wilson appears to infer.

LOUIS AMBLER.

SAXON REMAINS IN ENGLAND.

SIR,—Referring to the list in your last issue of churches that show signs of Saxon work, you* give but one instance for Herts. But is not Bengeo Old Church, Hertford, of Saxon origin and character?

The church is rubble-built; the quoins of the north-west corner of the nave are placed long and short. The chancel arch (cut through a wall 2 ft. thick) is of the narrow, door-like character referred

* We must point out to our correspondent that the list is not ours, but Professor Baldwin Brown's, who is solely responsible both for the credit of it and for omissions (if any) in it.—ED.

to by Mr. G. Gilbert Scott ("Essay," p. 48). The arch and jambs were evidently originally quite square cut and unmoulded; but the western face has been decorated with rude hatchet-cut ornamentation that would appear to be later than the construction of the arch, and yet Early Norman. There is ample room for an altar in the nave on each side of the arch (cf. Mr. Scott's remarks), and on the south side are traces of colour that *may* mark the place of a fresco. The one window in the north wall of the nave is placed high up, and is round-headed and splayed; but, except as a suggestion of a similar predecessor, it is of no value, as it is manifestly modern. The west window is Perpendicular, as also is the finer of the two south windows. The chancel is apsidal, and appears to have been originally lighted by three splayed windows, north, south, and east, but the north light has been blocked by a tablet, and the east light has had an Early English head inserted. There is a very plain, much damaged piscina—fifteenth century, I think.

The nave of the church appears to be used as a lumber-room. The chancel arch is boarded up, and the chancel alone used for service during part of the year.

I came across the church on a cycle ride, a few weeks ago. ALBERT MITCHELL.

CAPE TOWN UNIVERSITY BUILDINGS COMPETITION.

SIR,—Might I inquire through the medium of your columns whether anything is known to account for the somewhat lengthy period of silence which has elapsed since the designs in the above competition were sent in on January 31 last—more than three months ago?

I am the more led to make inquiry because a few days before the date stipulated in the conditions for sending in the designs a notification appeared, in your issue of January 31 last, to the effect that the time was to be extended to the last day of February, but that the assessor, Mr. Aston Webb, having objected to this extension, the date would not be altered.

This—in itself a rather curious circumstance—together with the time which has elapsed since the designs were submitted, prompts me to ask whether you, Sir, or any of your correspondents, have any information which would explain the matter. I enclose my card, and remain

A COMPETITOR.

*** We have no further information. The assessor, we believe, objected to the extension of the time because it was proposed at the request of one competitor only, and was therefore manifestly unfair to the remainder.—ED.

WAVERTREE CHAPEL COMPETITION.

SIR,—In reference to the above, I have been in communication with the Committee's secretary respecting the conducting of this competition (concerning which a letter appeared in your columns several weeks ago). He informs me in a letter replying to mine that "there was *no voting*; Mr. Hartley's decision was laid before the Committee (a body of twenty gentlemen), and his recommendation was accepted unanimously. The assessor, out of forty-four designs, weeded them down to six, and ultimately to two, 'New Era' and 'Pax,' and eventually fixed on the former."

I may say that the assessor was Mr. W. Hartley, F.R.I.B.A., of Liverpool, and the authors of the first and second designs were Mr. G. Baines, of London, and myself respectively.

I am sending this to you, Sir, as it will, no doubt, be a satisfaction to the competitors and to the profession generally to know that this competition has been decided fairly.

I was personally informed by Mr. Rogers that the exhibition was held and the book kept for the purpose of obtaining the names of persons likely to be interested in the scheme. A. GLADDING.

CITY CLOUDS.

SIR,—Have clouds any relation to large buildings, as they apparently have to hills? We find cumulus clouds habitually near certain hills (as if they were moulded by them), and Ruskin has spoken of others forming round clumps of pines. There are often squares of cloud over cities—block after block.

S. JAMES.

*** Perhaps some one who is proficient in meteorology can answer our correspondent's question.

ORGAN, ST. PETER'S CHURCH, BELFAST.—A new organ, presented to St. Peter's Church, was dedicated on the 26th ult. The instrument was built by Messrs. Norman & Beard, Ltd. It stands in a chamber on the north side of the chancel, the hydraulic engine and feeders for blowing being placed in a crypt below the church. The hydraulic engine is by Mr. Hugh Swanton, of London. The case, of carved oak, is the work of Messrs. Harry Hems & Sons, Exeter, under the supervision of the architect of the church, Mr. S. P. Close, A.R.H.A.

GENERAL BUILDING NEWS.

WESLEYAN METHODIST CHURCH, MAPPERLEY, NOTTINGHAM.—The memorial stones were laid on the 30th ult. of the new Wesleyan chapel which is in course of construction at Mapperley. The chapel is situated on the north side of Woodborough-road. The style is Gothic, and the building is being constructed of red brick, with dressings of Derbyshire stone. The basement is devoted to a schoolroom about 52 ft. by 34 ft. in dimensions, and containing three classrooms designed to accommodate between 400 and 500 children. Adjoining are kitchen and heating chambers, the intention being to warm the chapel by means of hot-water pipes. The chapel will be approached from the street level by a sloping path, and accommodation for upwards of 300 people is provided, the seats and doors being of pitch pine. Ministers' vestry, choir vestry, organ chamber, &c., are reached from the chapel. Provision is made for the addition of galleries when required. The architect is Mr. A. E. Lambert, and the contractor Mr. T. Barlow.

CHURCH, CHATHAM.—The memorial stones have just been laid of the new Church of St. Andrew, Victoria Gardens, New-road, Chatham. The architect was Mr. G. E. Bond, and the builder Mr. J. D. Corke, of Rochester.

WESLEYAN METHODIST CHURCH, ENDCLIFFE, SHEFFIELD.—The foundation stones of the new Wesleyan Methodist Chapel which is to be built in Ecclesall-road, Sheffield, near to Endcliffe Woods, were laid on the 1st inst. The building has been designed by Mr. Joseph Smith. The church is to seat 850 persons. The exterior walls will be of stone, faced with hammer-dressed local wall stones, and Stoke Hall ashlar stone dressings. There will be a nave, with centre and side aisle approaches, two transepts, apsidal-ended chancel, and choir with organ chamber on each side for divided organ. The scheme will cost about 9,650*l.*

CHURCH HALL, CATFORD.—St. Andrew's Church Hall, Catford, which is now being used as a temporary church, being crowded to overflowing, the architect, Mr. Philip A. Robson, A.R.I.B.A., has been instructed to prepare contract plans for the permanent structure immediately. The design will follow that which was submitted in the limited competition five or six years ago. The accommodation will be about 850.

CHURCH, LINCOLN.—On Saturday last week the foundation-stone of the new Church of All Saints', Lincoln, situate on the south side of the Arboretum, was laid. The new building was estimated to cost about 8,000*l.*, and the tender of Messrs. M. Otter & Co., amounting to 7,832*l.*, was accepted. The architect is Mr. C. Hodgson Fowler, F.S.A., of Durham. The plans provide for a nave, two aisles (north and south), chancel, choir and clergy vestries, organ chamber, &c., while it will be connected by means of a short passage with the present mission-hall. The building is to be of red brick, with stone dressings, and there will be a bell turret at the east end. The roofing is to be of polished pitch-pine, and will be covered with red flat tiles. The seating is to be of polished red deal, with open backs, and accommodation will be provided for over 500 people.

BAPTIST CHURCH, CAMBRIDGE.—The foundation-stone of St. Andrew's-street Baptist Church, Combridge, was laid on the 6th inst. The church is being remodelled and to a large extent rebuilt, with an entirely new frontage and interior fittings, making use as far as possible of the foundations and side walls of the present building. The seating accommodation of the new structure will be:—On the ground floor, 580 adults; in galleries, 326 adults; or a mixed congregation of over 1,000 persons. The materials for the front will be whole white flint facings to walls, and stone dressings and tracery to windows, &c, the joinery internally to be of Orham wood wax-polished, the choir seats and pulpit of oak as left from the plane, glazing to windows of richly coloured lead glazing. The cost will be about 8,000*l.* exclusive of furniture. The exterior from St. Andrew's-street will have a square tower, rising to a height of 60 ft. to the parapet with a spirelet rising to a height of 90 ft. from ground. This tower will have a three-light tracery window in the belfry stage on all sides, and a doorway at its base, leading to one of the staircases up to the gallery. On the opposite side of the main front will be a similar doorway, leading to the second staircase to gallery. In the centre rises a gable with carved traceried apex and finial, and comprising a five-light tracery window with moulded reveals and arch surmounted by moulded gable and finial and moulded traceried parapet. On the side elevations will be four large traceried windows on each side. Internally the seats will be circular on plan, radiating from the pulpit. There will be a wood traceried arcade supported on columns, and hammer-beam trussed principals to the roof. The choir seats will be raised behind the pulpit in a semi-octagonal apse, with carved ceiling and large windows. An organ-chamber opens out of the apse with arches. On either side is a vestry. A corridor extends across the rear of apse and vestries, giving convenient access to the choir and vestries without passing through the church, and having two separate exits, one at each end. Two additional exits are provided from the aisles at rear of church. A church parlour, about 26 ft. by 15 ft., with lavatories attached is provided, opening out of the rear corridor. There is access from the church to the school buildings. The architects are Messrs. George Baines & R. Palmer Baines, Clement's-inn, Strand, London, W.C.

WORKHOUSE, HASTINGS.—A new Union Workhouse has been erected at Hastings at a cost of 55,000*l.* The building is situate opposite the old structure, with which it is connected by a subway, for the present infirmary will still be in use. The materials used are East Sussex kiln bricks with Bath stone dressings. There are three main blocks, the centre of which is devoted to the administrative department. Here are to be found the master's and matron's apartments, and the other officials' rooms. At the rear of these is a dining-hall, the dimensions of which are 70 ft. by 37 ft. Behind this again is the kitchen. This central block is flanked on either side by the men's and women's pavilions, the latter of which is 260 ft. long; the men's, however, is not quite so long. The ground floor of the pavilions, which are about 45 ft. in height, is used for day-rooms, and the first and second floors as dormitories. Sleeping accommodation is provided for 154 men and 184 women. On the west side are situated quarters for the blacksmith, tailor, carpenter, and shoemaker; here is also the bakery and the laundry. In this portion of the premises is the boiler-house, containing two boilers, which drive the machinery used in the laundry, and which is surmounted by a chimney shaft 80 ft. high. The entrance block consists principally of accommodation for male and female vagrants. There are forty-four compartments in the casual ward, half of which are provided with a little cell, where the vagrant has to earn his night's lodging by breaking a quantity of stone, small enough to be thrown through the iron grating with which each little cell is fitted. There is also an apparatus for fumigating tramps' clothes; while other space is taken up by the male and female probationers' wards, store-rooms, porter's offices, and waiting-rooms. Messrs. A. W. Jeffery & Son were the architects of the new workhouse, and Mr. Jenkins the builder.

POLICE STATION, SOUTHWICK, DURHAM.—A new police station for the Durham County Constabulary, at Southwick, is being erected. The new building is situated in Shakespeare-street North, on a portion of a large site purchased by the Durham County Council for the purpose. The premises have been erected in the Queen Anne style from the designs of Mr. Wm. Crozier, County Surveyor and Architect. Living accommodation is provided for an inspector and his family and three single constables. The cells are four in number, and are all connected with a system of electric bells. Mr. J. G. Kilburn was clerk of works.

POLICE STATION, BYKER.—The new Byker police-station was opened on the 1st inst. The buildings consist of three sections, each complete in itself, viz., fire-station, police-station, and superintendent's house. The principal entrance to each is in Headlam-street. The fire-station comprises on the ground floor an engine-house with watch-room adjoining, and stable for three horses, &c. The three floors above each consist of a fireman's house. The stalls of the stable open directly into the engine-house at the rear of the fire appliances, both the large gates and the doors being fitted with Wm. Try's patent fittings. The walls are lined with opalite, and the floors laid with hard, impervious briquettes. The ground floor of the police-station is occupied by a square entrance-hall and staircase, from which access is gained to superintendent's office, surgeon's room, waiting-room, parade-room, and charge-room. Through the charge-room the cells corridor is approached, on either side of which are arranged the six cells and bathroom connected therewith. On the first floor a recreation-room and reading-room and a mess-room are provided, as well as kitchen, with the messman's living-rooms adjoining. The second floor is given up to sleeping accommodation for twenty single constables. The superintendent's house is between the fire-station and the police-station, and communicates internally with the latter. Each section has its own yard, outbuildings, &c. Externally red brick is used and stone dressings. Over the staircase of firemen's quarters a clock tower rises. The general contractor for the works was Mr. Isaac Bewley, Dunston. The plumbing was by Messrs. Bland Bros.; the electric wiring by Messrs. Robson, Robson, & Co., the current being supplied from the Corporation Power Station under Mr. A. le Rossignol. The heating engineers were Messrs. Wm. Scott & Sons, Newcastle and Jarrow. The clerk of the works was Mr. Thos. Marriner, and the clock was by Messrs. Reid & Sons, of Newcastle. The architects, Messrs. Cackett & Burns Dick, were appointed as the result of a competition, in which their design was placed first by the Corporation's assessor.

SCHOOL, BLACKPOOL.—A new Board school has been erected in Thames-street, South Shore, from the designs of Mr. H. Wade, architect, of Blackpool, Mr. C. Place being the Board's clerk of works. The school is a one-story building, with separate central halls for infants, juniors, and seniors. The front elevation is of Withnell brick, with Aspatria stone facings. There is accommodation for 1,096 children, and the cost of the school has been estimated at about 25,000*l.* The general contractors for the erection of the school were Messrs. J. Parkinson & Sons, of Blackpool, and the various sub-contractors were:—Plastering and slating,

Messrs. W. Walker & Co., Blackpool; plumbing and glazing, Mr. J. Coulson, Blackpool; painting, Mr. J. Hall, South Shore; heating and ventilating, Messrs. Wagstaff & Co., Dukinfield; ornamental railings and gate, Mr. J. Monk, Preston; asphalting, Messrs. Stanbury Bros., South Shore; and street-making and sewering, Mr. R. Escome, Blackpool.

CHURCH HALLS, ARBROATH.—New church halls are being erected in connexion with St. Margaret's Parish Church, Arbroath. The halls have been erected from designs prepared by Mr. Hugh Gavin, architect, Arbroath, and have cost about 1,200*l.* The principal hall is 50 ft. by 24 ft., and is designed to accommodate 250 persons, while the other apartments consist of a Session House and a Guild room. The contractors were:—Masons, Ramsay & Gordon; joiner, R. C. Farquhar; plumbers, Herron & Colville; slaters, Mitchell & Son; and plasterer, Alexander Patterson.

BANK PREMISES, BLACKHILL, DURHAM.—New premises for the York City and County Banking Company have been erected in Derwent-street, Blackhill. The new bank, which has cost between 3,000*l.* and 4,000*l.*, is of three stories, and has been designed by Mr. G. T. Wilson, architect, Blackhill, while the principal contractor was Mr. Joseph Eltringham, also of Blackhill. The sub-contractors were Mr. William Strachan, Blackhill, plumbing; Mr. George Nicholson, Leadgate, slating; Mr. Frankland, Blackhill, plastering and cementing; and Mr. Surtees Leslie, Shotley Bridge, painting and decorating. On the ground floor is the bank room and counting-house, 20 ft. in width and 24 ft. in length. From the main entrance there are separate means of access to the manager's private apartments, the clerk's office, and the banking department.

FREE LIBRARY AND POLICE STATION, FOLESHILL, COVENTRY.—The building in course of erection in Holmsdale-road, Foleshill, for use as a public library and police station is approaching completion. The buildings are of red pressed bricks, with red Runcorn stone dressings, and in the Renaissance style. Three front entrances lead respectively to the police station, the police superintendent's apartments, and the public library. The entrance to the public library leads through a vestibule and swing doors, with check springs, to the borrowers' lobby, which is divided by a counter from the lending department. Proceeding through the borrowers' lobby, access is gained to the reading-room, 25 ft. by 28 ft. The part of the building devoted to the purposes of the police consists of a charge-room, with three cells at the rear, and apartments above. The charge-room, situated at the front of the building, is entered from the street through a vestibule. At the rear, corridors for the prisoners to take exercise in lead to the cells, two of which are for males and the other for females. Beyond the cells is the boiler-house, from which the ground floor of the entire building is heated, radiators being placed in the principal rooms. In the upper story are rooms for the accommodation of the police who live on the premises. The superintendent or sergeant in charge has apartments above the free library, with separate entrances from front and back. The building will be lighted by electric light from the Corporation's cables. A fire station has been erected on a site at the rear of the building, communicating with Holmsdale-road by means of a roadway 10 ft. wide. The architect for the building was the Borough Engineer and Surveyor (Mr. J. E. Swindlehurst), and the contractor is Mr. C. Gray Hill; Mr. G. E. Cluett being the foreman.

PUBLIC LIBRARY, EDINBURGH.—An extension has just been made to the library in George IV. Bridge. The extension, which is at the north-west corner of the present building, extends as far as Maconochie's Close, Cowgate, and consists of a book stack four stories in height, and rising 110 ft. from the Cowgate level. With the exception of the newsroom story, the other flats are sub-divided by iron floors into stories about 7 ft. in height. The upper story, which is divided into four flats, is to be used for reference works, and the story below that, which is divided into three flats, is for the lending library, while the three flats below the newsroom floor are for general storage of books previous to their allocation. The newsroom floor is in extension of the present newsroom, and will be chiefly used by magazine readers. This apartment is 25 ft. in height, and is approached from the present newsroom through a faience archway, corresponding to that in the north-east corner of the building. The room has been finished in some respects in correspondence with the remainder of this part of the library, the walls being panelled to the height of about 7 ft. 6 in., and between the windows oak bookcases have been fitted. The room is furnished with eight tables, and lighted by three windows 16 ft. high. Access to the whole of the floors is obtained by an electric lift, supplied by Archibald Smith & Stevens, London. On the west side the exterior walls are of stone, and on the north and east they are of white enamelled brick. Hot-water pipes and radiators supply the heating. The architect was Mr. R. Morham, City Superintendent of Works; and the builders, Messrs. Kinnear, Moodie, & Co. and Colin Macandrew. The cost has been about 6,000*l.*, the accommodation provided is for 125,000 volumes.

FRIENDS' MEETING HOUSE, CHELTENHAM.—The new meeting house at Cheltenham for the Society of Friends was opened on the 4th inst. The building, which is erected in Portland-street, consists of a meeting-room, hall, and cloakrooms on the ground floor, and a large classroom on the the first floor, which can be used as a gallery for the meeting-room if required. The cost of the building is about 1,000*l.* The architect is Mr. Henry T. Fowler, Barrow-in-Furness, and the builder, Mr. W. T. Nicholls, Gloucester.

FOREIGN.

BUILDING AFFAIRS IN AMSTERDAM.—According to Mr. Consul Robinson's annual Report on the trade and navigation of the port of Amsterdam, building has been active and profitable throughout the past year, and is still in a flourishing condition, both as regards the quarters of the labouring classes and the better description of dwelling-houses; but the trade has been much disturbed by the restlessness and the constantly renewed demands on the part of the workmen. The exodus of the wealthier classes to the neighbouring towns, in which municipal taxation is still comparatively light, continues to take place, and the immediately outlying parishes of the city are also being filled with cheaper dwellings, with the inducements of much more moderate taxation. The construction of the new entrepôt dock for bonded goods was completed during 1902, and the dock is now in use. The new Exchange nears its completion, and will probably be opened in the course of this spring. The old Exchange building will be removed at once after the occupation of the new one. The erection of central electrical works for the municipality will not be completed for another year or two. The former entrepôt dock will be filled up, and a part of the ground thereby acquired will converted into an extension of the goods station of the State railways. With regard to the North Sea Canal to Ymuiden, it may be mentioned that the new railway bridge over the canal at Velzen has been completed; but that the footbridge, which is so great an obstacle to shipping passing through the canal, has not yet been removed. The pontoons, which have been constructed as a ferry for passengers and carriages or carts, have unfortunately proved a complete failure after many trials, and new means will have to be adopted to replace the footbridge when removed. The entire reconstruction of the railway and footbridge over the canal on the line leading to Zaandam has been decided upon, and this bridge, another of the serious obstacles to the navigation of the canal, will be raised to a clear height of 39½ ft. above the level of the water, thus admitting of the passage of a much larger number of vessels without the necessity of opening the bridge. The newly-constructed breakwater and quay outside the commercial quay, now called Y Quay, is in working order. Several sheds have already been constructed and others are in course of construction by the municipality, which lets them to private firms and companies.

MISCELLANEOUS.

PROFESSIONAL AND BUSINESS ANNOUNCEMENTS.—Mr. Geo. Pearson, architect and surveyor, of 50, Moorgate-street, has taken his son, Mr. J. Herbert Pearson, into partnership. The practice will be continued under the style of "George Pearson & Son."——Messrs. Easton & Co. have appointed Messrs. J. Lomax Kendal & Co., of St. James's-square, Manchester, as agents for their hydraulic and electric lifts for the cities of Manchester, Stockport, and Salford.

THE VICTORIA AND ALBERT MUSEUM.—We are glad to find that we were mistaken in the idea that this great building is to repeat the prevalent use of terra-cotta frontage in its neighbourhood. The drawing in the Academy for some reason gives very much the impression of terra-cotta architecture, but in fact it is being carried out with Portland stone.

FIREPLACE LINTELS.—Mr. Louis J. Newton sends an illustration and description of his skeleton fireplace lintel, a kind of short open box-beam intended to supersede the time-honoured chimney bar. It is fixed at ordinary height of range or register, and the open front of the lintel is filled in with three courses of 4½ in. brickwork after the grate has been set. Where there is much weight over a fireplace opening it is certainly an improvement on the time-honoured bar.

PROPOSED INFECTIOUS DISEASES HOSPITAL, LINCOLN.—On the 28th ult. Mr. E. P. Manby, M.D., Inspector for the Local Government Board, held an inquiry at the Guildhall, Lincoln, into the application of the City Council for sanction to borrow 5,500*l.* for the erection of an infectious diseases hospital at Lincoln.

STREET IMPROVEMENTS, FALKIRK.—An extensive street improvement is to be carried out in the Lintriggs, Falkirk. The improvement consists of the substitution of a 40 ft. wide street for a lane, 8 ft. wide, which at present connects two of the main thoroughfares—High-street and Newmarket-street. To accomplish this purpose the Town Council purchased property in the vicinity, at a cost of 12,600*l.*, giving an area of 3,169 square yards. The scheme has been prepared and the plans drawn by Mr. David Ronald, C.E., Burgh Engineer.

ST. LOUIS, MISSOURI, EXHIBITION, 1904.—A Royal Commission is appointed to obtain and distribute full information as to the best mode in which this country and the British Dominions beyond the seas may be duly represented at the International Exhibition of Arts, Industries, and Manufactures, and the Products of the Soil, Mine, Forest, and Sea, to be held at St. Louis, Missouri, in the course of next year. The Prince of Wales is nominated President of the Commission, which consists of thirty-seven members and includes Sir William H. Preece; Mr. Horace Plunkett, Vice-President of the Department of Agriculture and Technical Instruction for Ireland; Sir Edward Poynter; Sir L. Alma-Tadema; Sir Caspar Purdon Clarke, Director of the Victoria and Albert Museum (Art Museum); Messrs. Thomas Brock, T. G. Jackson, W. Q. Orchardson, and E. A. Abbey; and Messrs. Clement Le Neve Foster (Professor of Mining at the Royal School of Mines, London), J. C. Hawkshaw (President of the Institution of Civil Engineers), W. Maw (President of the Institution of Mechanical Engineers), and F. Grant Ogilvie (Director of the Edinburgh Museum of Science and Art). Colonel C. Moore Watson is appointed as secretary to the British Commission.

THE ORDNANCE SURVEY.—The original programme of the ordnance survey will shortly be completed by the issue of the map on a scale of ten miles to the inch, which, having been intended at the outset to serve as an index to the one-inch map, was adopted in 1892 by the Military Map Committee for strategical uses. The survey on that scale extends over twelve sheets, whereof the last will be published in three months hence; a hill edition of the survey is being prepared, and will, it is expected, be finished at the close of the current year. Colonel Johnston, R.E., Director-General, is now engaged in preparing for publication a map to the scale of two miles to the inch as a supplement to the current issue of the coloured maps of England and Scotland on the scale of four miles to the inch, whereon a new process of stipple-shading is adopted for indicating inclines, and five different tints are employed. In the new two-miles series only the bolder inclines are shown in stipple, the contours being outlined, and both being coloured in brown; black is used for the names and outlines, blue for water, green for woods, and burnt sienna for principal roads. Each sheet, covering 864 square miles, has a printed space of 18 in. by 12 in., and is sold for one shilling; the sheet may also be bought mounted upon linen and folded between two covers. It is intended, at present, to issue sheets of the map for certain of the more frequented parts, but not for the whole, of the kingdom.

THE SHREWSBURY CELEBRATION.—The ancient city of Shrewsbury proposes in July to celebrate the 500th anniversary of the battle of Shrewsbury, as marking an epoch in the history of the town. The battle was fought on July 21, 1403. The programme of the celebration, which will extend from Sunday, July 19, to Saturday, July 25, will include two performances of Shakespeare's "Richard II.," "Henry IV.," and "Henry V.," and a good deal of attention will also be paid to architectural antiquities. There will be lectures on the church and college by the Rev. D. H. S. Cranage and Mr. St. John Hope, and visits to the Shrewsbury churches and to Wroxeter and Houghmond Abbey under the guidance of the Shropshire Archæological Society. These, at least, are parts of the programme as already proposed, though it may be subject to revision. Any further information will be supplied by the hon. secretaries, Messrs. Adnitt & Naunton, The Square, Shrewsbury.

THE WORSHIPFUL COMPANY OF CARPENTERS.—A series of lectures on carpentry and joinery are announced to be held at Carpenters' Hall each Thursday in May and on June 4. There are two new names on the list of lecturers, viz.: Mr. H. D. Searles Wood, who lectures on "Timber, its Nature, Properties, and Applications," and Mr. Lewis Solomon, whose subject is "Stresses and Strains." The other lecturers are Professor R. Elsey Smith, A.R.I.B.A., and Mr. James Bartlett, Assistant Lecturer at King's College.

SUBSIDENCE IN THE STRAND.—At about nine o'clock on Sunday evening the watchman on the Savoy building operations in the Strand was alarmed by the sound of cracking timber. Proceeding to the road he saw the pavement in front of the hoarding erected there sinking gradually, as it were, into the earth. The hoarding itself and the platform hoarding above were tilting over and slowly increasing their angle. He raised the alarm and the police and a brigade of the Salvage Corps were quickly on the spot. Barriers were erected around the fallen pavement and the foot traffic directed to the other side of the road. A 4-in. gas main runs close by, and immediately under the scene of the accident run three electric cables, one of the London Company of 10,000 volts. Beneath the hoarding on the works side is a drop of some 30 ft., where excavations have been made for building purposes, and the whole district seems to be honeycombed with cellars of an ancient date. On the top of the hoarding platform are some eight or nine tons of old bricks, and these, with the heavy rains, seem responsible for the subsidence.

ARCHÆOLOGICAL DISCOVERIES IN CRETE.—The correspondent of the *Times* in the Balkan Peninsula

writes from Sofia, April 22 :—The excavations begun towards the close of last season at Hagia Trias, near Phæstos, on the southern coast of Crete, by Professor Halbherr, have been resumed this spring under the direction of M. Hatzidakis, the ephor of antiquities at Candia. It will be remembered that at this spot Professor Halbherr made the very interesting discovery of another Mycenæan palace similar to those at Knossos and Phæstos. The palace is conjectured to have been the maritime residence of the Kings of Phæstos, for the sea, which is now some two kilomètres from the site, has probably receded considerably since Homeric times. The recent excavations have revealed a large structure containing the usual *μέγαρον*, or hall for men, another *μέγαρον* for women, baths, and *ἀποθῆκαι*, or storerooms. No cisterns or water-pipes have yet come to light. The principal movable objects discovered by Professor Halbherr last year have already been described in the *Times*. In addition to these a large number of clay seals have been found here, as in other Cretan dwellings of this period, and some dozen inscribed tablets exhibiting the mysterious linear or pictographic signs, which as yet have defied interpretation. Among the bronze objects recovered are several statuettes, votive effigies of oxen and goats, a spear-head, and ten double axes of the usual Cretan type, together with two small votive double axes. Nineteen talents of bronze, in the shape of rectangular *plaques*, have also been found; these apparently served as standard weights, or were employed in commercial transactions. A large amount of pottery has also been recovered. The excavations, which have been suspended during the Easter holidays, will shortly be resumed.

PUBLIC IMPROVEMENTS, BELFAST.—On the 1st inst. Mr. A. D. Price, M.Inst.C.E., Local Government Board Inspector, sat in the Town Hall to conduct an inquiry into the application of the Belfast Corporation for the Board's sanction to the following loans:—50,000*l.* for the purpose of the completion of the new City Hall, and for the fitting and furnishing of same and improvements to the grounds; 10,000*l.* for the purpose of providing electric motors, fittings, and apparatus, including those purchased before the passing of the Belfast Corporation Act, 1902; and 1,500*l.* for the purpose of making additions to the Model Lodging-house for Men, Carrick House. Mr. Alfred Brumwell Thomas, architect for the new City Hall, said the amount of the contract was 149,864*l.*, but now they wanted additional expenditure. The height of the building was to be increased by 3 ft., which would cost 3,750*l.*, or 1,250*l.* for each additional foot in height. Mr. Thomas gave details of the items which necessitated the additional expenditure, and illustrated his remarks by means of plans, drawings, and photographs.

PARISH CHURCH, LODDON.—The long-continued restoration and repair of the church of Holy Trinity is now completed, with the reseating of the nave and aisles, at a cost of about 600*l.* Ten or eleven years ago a sum of 1,100*l.* was expended upon the repair of the nave roof, the aisles, the clearstory, and the western pinnacled and embattled tower. The church was built of flint, with stone dressings, in the latter half of the fifteenth century. In the south aisle is a curious framed painting (1496) representing Sir James Hobart and his wife, kneeling, with views of the church and St. Olave's bridge; an inscription records that he rebuilt the church, and his wife the bridge. Sir James Hobart was Attorney-General and of the Privy Council to Henry VII., and ancestor of Sir Henry Hobart, Bart., Lord Chief Justice of the Common Pleas and Chancellor to Henry and Charles, Princes of Wales, in the reign of James I.

CHERBOURG STONE.—Mr. Loftus, British Consul for the district of Cherbourg, in the course of an interesting report to the Foreign Office on the affairs of his consulate, observes:—"The stone exported from this port consists chiefly of broken stone for road making and mending. This is sent to the southern and south-easterly counties of England in British vessels, which usually come into the port light or with very little ballast, and carry the stone to such ports as Shoreham, Rochester, Poole, Langston, Rye, Whitstable, Gravesend, Ramsgate, and Southampton. This stone is termed quartzite, and is known in the United Kingdom as granite; it is, however, not so hard as the real granite in the true sense of the term; the only district in which hard granite is quarried is Fermanville. This is not extensively exported, one of the reasons, doubtless, being that Dielette, the port of Fermanville, is very small and also very shallow, and does not permit any vessel of size to come into the port to load the stone, if they wished to do so. The stone exported from Cherbourg is broken by hand, for experience proves that it was not possible to keep the size uniform if the stone was broken by machinery. The sizes of the cubes into which this stone is broken are as follows:—1½-in. and 2-in. cubes, at 6*s.* per ton, delivered on board; 2½-in. cubes, at 5*s.* 9*d.* per ton, delivered on board. The freight charges to the southern ports of the United Kingdom, such as those mentioned before, are 4*s.* 6*d.* per ton. There is a plant in one of the quarries near Cherbourg which screens the broken stone by machinery, to insure uniformity of size. The principal companies interested exported between them during the year 1901 in all 120,000 tons of stone, and in 1902 the amount was 120,502 tons. The trade is in every way prosperous, the annual returns usually showing an increase over the preceding year as regards the amount of stone exported."

JOHNS IMPROVED PATENT WINDOWS.—We have seen a working model of this window sent to us by "Incorporations Ltd.," who own the patent. It is one of the scores of contrivances for turning sash windows for cleaning, but has greater merits in the way of simplicity and easy working than many of them. A metal water bar in the side of each sash, working in a slot in the frame, is drawn back by two small metal nuts projecting through slits in the front of the sash, which is then reversible. The only question is about the entirely watertight quality at the bar, which cannot of course fit quite tight; but this may be provided against by throating. At all events the action is perfectly simple, and hardly requires an explanation.

TECHNICAL SCHOOL EXTENSION AT DUDLEY.—On the 1st inst., Lieutenant-Colonel A. C. Smith, R.E., on behalf of the Local Government Board, held an inquiry at Dudley Town Hall relative to the application of the Corporation for sanction to borrow 1,830*l.* for the purchase of premises in Stafford-street and the adaptation of the same for the purposes of a technical school. Mr. J. Gammage (Borough Surveyor) having given details respecting the work, the inquiry terminated.

AMENDED TENDERS, CARDIFF.—At the meeting of the Cardiff Guardians on Saturday last week the Board considered the report of a special meeting of the Building Committee, which stated that tenders for the alterations to buildings at Ely were received from Lattey & Co., Ltd., 3,777*l.* 16*s.* 8*d.*; George Burgess, 3,725*l.*; A. W. Cadwallader, 3,100*l.*; John Gibson, 2,944*l.*; Knox & Wells, 2,899*l.*; W. Thomas & Co., 2,873*l.*; James Allan & Sons, 2,707*l.* 6*s.*; Price Bros., 2,690*l.*; Charles Beames & Nephew, 2,620*l.*; E. Turner & Sons, 2,448*l.*; W. T. Morgan, 2,425*l.*; Blacker Bros., 2,357*l.*; W. Symonds & Co., 2,258*l.* 1*s.* 5*d.*; and C. C. Dunn, 2,126*l.* 2*s.* 6*d.* A letter was read from Mr. C. C. Dunn stating that he found he had omitted to include in his tender the amount of the slating and plastering summary in one bill, and he asked the Board to add the sum of 51*l.* 8*s.* 11*d.* to the amount of his tender. It was resolved, by ten votes to five, that Mr. Dunn's amended tender of 2,177*l.* 11*s.* 5*d.* be admitted to competition. Having further considered the schedules of prices to be allowed for old materials and of charges for day work accompanying the two lowest tender, the Committee resolved to recommend the Board to accept the tender of Mr. C. C. Dunn for alterations to buildings at Ely at 2,177*l.* 11*s.* 5*d.* Alderman S. Mildon (Chairman of the Committee) moved an amendment that Mr. Dunn's tender be accepted, and not the amended tender. His contention was that once a tender had been opened, it was unreasonable to accept any amended tender, and he thought they ought to stand fast to that principle. He (Mr. Mildon) could secure any contract in a public body in Cardiff provided the principle of an amended contract was accepted. He did not say how it could be done, but it could be done, and he could do it. Mr. J. Enoch seconded. Mr. C. W. Melhuish moved that the amended tender be accepted. He said emphatically that if the bills of quantities had been correct and no omissions had been made, Mr. Dunn's mistake would not have been made, and he thought the Guardians were primarily responsible for that mistake. Mr. R. Sutherland seconded the last speaker's motion. Upon a division, Mr. Mildon's amendment was carried, 30 voting for and 21 against.—*Western Mail.*

BUILDING RESTRICTIONS AND HOUSING.—The Glasgow Housing Commission is nearing the end of its public labours. It was officially intimated at the close of the sitting on the 1st inst. that the list of witnesses will be exhausted towards the end of this month, and that any person desiring to tender evidence should at once communicate with the Secretary, Mr. William Brodie, 77, St. Vincent-street. The only witness examined on the 1st inst. was Mr. T. L. Watson, F.R.I.B.A., who gave evidence on behalf of the Glasgow Institute of Architects. Confining himself mainly to the architectural aspect of the subject, he complained at the outset that the Glasgow Building Regulations Acts of 1892 and 1900, while beneficial in effect, contained certain provisions which had increased the cost of building without improving the amenity of the poorer districts, and some which, by restricting the freedom of the designer, tended rather to prevent improvement. He suggested, therefore, to the Town Council the revision of the Acts with a view to cheapening and improving the character of workmen's dwellings. He pointed out that, by an extraordinary omission, no distinction was made between the thickness of the walls of dwelling-houses and of those of other buildings, such as stores and warehouses, and that the former were in thickness greatly in excess of their requirements, this resulting in a most unnecessary throwing away of bricks and mortar. A comparison of the London and Glasgow Acts brought out the statement that, as the former were sufficient for all purposes of safety, it was evident that the Glasgow Acts involved an absolute waste of money and to that extent interfered with the erection of cheap dwellings. Mr. Watson also argued for a relaxation of the minimum width of 50 *ft.* for new streets. The present standard fixed by the Act so far as tenement property was concerned was too high. Asked if he would have narrower streets in order to utilise the ground, Mr. Watson said he would have them closer together, and also narrower where the buildings were very low, or recessed from the building line. With narrower streets it would be possible to build cottages and small self-contained houses in outlying districts. In the more central localities it would be possible not only to abolish the back land, but to dispense with back yards and lanes, and to provide open playgrounds in front of the houses, and this the witness illustrated by plans and diagrams. He considered that the Building Regulation Acts interfered unduly with the legitimate and useful process, under proper restrictions, of "making down" existing houses. There were many buildings of that class which could be made perfectly sanitary, and let at rents lower than those charged for new houses. Mr. Watson concurred with and adopted two suggestions made by the Institute of Architects to the effect that the municipality should either refrain from building or restrict themselves to building for the poorest class of tenants, such as could afford to pay rents not exceeding 2*s.* 6*d.* per week, and that they should remove any existing and unnecessary restriction upon private effort.—*Glasgow Record.*

THE BRITISH EMBASSY BUILDING.—In our "Letter from Paris" last week the date of the purchase of the house by the English Government should have been given as 1815, not 1850.

METROPOLITAN WATER BOARD.—The third meeting of the Metropolitan Water Board was held on the 30th ult. at the offices of the Metropolitan Asylums Board, Sir J. T. Ritchie presiding. The principal business on the agenda was the election of the permanent Chairman and Vice-Chairman. Mr. R. M. Beachcroft was elected to the former post, the latter not being proceeded with. The Chairman reported that Mr. Henry Clarke had been chosen Chairman of the General Purposes Committee; Mr. H. Percy Harris Chairman of the Law and Parliamentary Committee; and Mr. D. J. Morgan, M.P., Chairman of the Finance Committee. The Board adjourned until May 8 at half-past two.

WORKMEN'S DWELLINGS IN NEWCASTLE.—The special Committee of the Newcastle Corporation for dealing with the projected erection of workmen's dwellings to replace those that have been extinguished by recent improvements, passed a resolution on the 4th inst. to erect a street of houses in Walker-road. The dwellings to be erected there will accommodate 228 tenants. The estimated cost, it is stated, will be about 98*l.* a room.

PRIZE FOR A DUST-ARRESTING RESPIRATOR.—The Council of the Society of Arts are prepared to award, under the terms of the Benjamin Shaw Trust, a prize of a gold medal, or 20*l.*, for the best dust-arresting respirator for use in dusty processes and in dangerous trades. As far back as 1822 the Society awarded its Gold Medal to Mr. J. H. Abraham, of Sheffield, for a magnetic guard to protect persons employed in dry grinding. The apparatus, described in the Society's "Transactions" (Vol. 40, 1822, page 135), includes a respirator to cover the mouth and nose. This respirator was fitted with magnets, for the purpose of arresting the fine particles of steel thrown off in the process of pointing needles, and in other processes of dry grinding. Although the invention was greatly appreciated at the time, it appears never to have come into practical use, the main objection to it having been, it is believed, raised by the workpeople themselves, who feared that the lessened risk attached to their employment would lower their wages. Similar considerations have, it is believed, stood in the way of the introduction of various appliances intended to limit the risks associated with all trades in which the workpeople breathe a dusty atmosphere. The Council, however, think that such considerations are likely to have less weight at the present time, and they hope that the offer of a prize may draw the attention of inventors to the matter, so that it may result in the production of some suitable piece of apparatus, despite the difficulties with which the solution of the problem is surrounded. Further particulars can be ascertained from the Secretary, Society of Arts, John-street, Adelphi, W.C.

METROPOLITAN ASYLUMS BOARD.—At the last meeting of this Board, the Hospital Committee, reporting from the point of view of risk from fire, on the subject of the use of temporary buildings for hospital purposes, said it had already been decided by the Board to demolish two out of eight wooden huts at the Northern Hospital, and the question of replacing those eight huts by permanent buildings was before the Board. The demolition of the temporary hut at the South-Western Hospital and of one of the temporary huts at the South-Eastern Hospital was proceeding, and the question of reconstructing a part of this hospital in permanent materials was under consideration. At the North-Eastern Hospital the Board had approved of steps being taken for pulling down the wood structures there, and completing the reconstruction of the hospital in permanent materials, and the whole matter of the preparation of a scheme for their consideration was before the Works Committee at the present time. There remained to be considered the Fountain Hospital, which was constructed

entirely of corrugated iron and wood; and the wooden buildings at the North-Western Hospital. As to the recent fatal fire at Colney Hatch Asylum, it seemed to the Committee that, as between a lunatic asylum and an infectious hospital, the circumstances of fire risk in wooden buildings were more favourable to the hospital. At the same time, the risk existed, and must, they thought, be taken into account. They did not advise, however, at present at all events, any further demolition of existing temporary structures, but were of opinion that the accommodation which the temporary structures afforded at the Fountain and North-Western Hospitals should be looked upon in the light of a second line of defence, and be used only for purposes of emergency, and when the number of cases rose considerably. Following this principle they proposed to empty the Fountain Hospital and the temporary buildings at the North-Western Hospital of patients as circumstances of infectious disease made it practicable, and to utilise permanent accommodation to the fullest possible extent. The empty buildings would be kept aired, clean, and ready for use at short notice; so as to provide for quick expansion of accommodation in time of increased needs.

SHAKESPEARE'S BIRTHPLACE.—The annual meeting of the trustees and guardians of Shakespeare's birthplace was held on the 5th inst. at Stratford-on-Avon. The Mayor (Councillor Bird) presided. The Chairman of the Executive Committee (Mr. Edgar Flower) dealt with the agitation raised against the trustees, who, it was alleged, intended to demolish the ancient cottages adjoining Shakespeare's birthplace in order to make room for a Carnegie free library. Nothing was further from the fact. It was never intended by the trustees to erect the library on the site of the cottages. They had been given for the sole purpose of extending the garden and so isolating the precious buildings. The cottages were modern, and of no historic or sentimental value. The same spirit of conjecture and misstatement was abroad regarding the proposed building. It had been persistently stated that a palatial modern structure was to be erected. On the contrary, what was intended was the careful restoration when possible of an ancient, but dilapidated, and wretchedly modernised house, and the filling up of a vacant piece of ground adjoining the School of Art with a building suitable for its purpose and situation.

ST. BARTHOLOMEW'S HOSPITAL.—The Lord Mayor's Committee of Inquiry into the affairs of St. Bartholomew's Hospital met on the 5th inst. at the Mansion House, the Lord Mayor presiding. The meeting was held for the purpose of receiving the report of the Sub-committee on Administration and Finance, of which Sir Thomas Jackson was the chairman. After a lengthy consideration of the report, the following resolution was unanimously agreed to: "That this committee, having carefully considered the report of the sub-committee on the financial and administrative management of the hospital, which is summarised in the 'conclusions' given below, are of opinion that the governors have completely vindicated the reputation, character, and administration of the hospital, and are fully justified in appealing to the public for funds to enable them to utilise the land acquired from Christ's Hospital, and to provide the new buildings urgently necessary to bring the hospital up to modern requirements in all respects."

TENDERS FOR PIPES, BARROW.—At a meeting of the Barrow Town Council on the 4th inst. a discussion took place with regard to placing contracts for the water-pipe track, 16 miles long, from Duddon to Barrow. The Committee recommended the acceptance of Messrs. Hannay & Clarke's tender for pipes amounting to 42,305*l.*, and of Messrs. John Aird & Sons' tender for the laying of the track, amounting to 26,417*l.* It was admitted that these were not the lowest tenders, but they were about 20,000*l.* less than the Engineer's estimates. After the Council had discussed the matter in private the recommendation was agreed to.

SCHOOL OF ART NEEDLEWORK.—Messrs. Martin van Straaten & Co. write to say that their name, and not "Messrs. Martin," should have been given as the contractors for the marble staircase and floor.

CRIEFF WATER EXTENSION SCHEME.—The new reservoirs and filters in connexion with the Crieff water extension scheme from Loch Turret, erected on the Knock Hill, and situated on the north-west side of the town, were opened on the 29th ult. The engineer of the works was Mr. Gilmour, C.E., Glasgow, and Messrs. Kerr & Halley were the contractors. The new reservoir is circular in shape, being 100 ft. in diameter and 20 ft. in depth to top water level. The filters, two in number, are each 60 ft. by 40 ft., by 5 ft. 6 in. The cost of the present water extension scheme, including erection of reservoir, filters, and laying of new piping from Loch Turret, &c., is about 12,000*l.*

CAPITAL AND LABOUR.

PRESTON PAINTERS' STRIKE.—A meeting between the Committee of the Master Painters of Preston and a deputation representing the employees at present on strike, was held recently in the Castle Hotel, Preston. The meeting was called in response to the offer of the men to submit the question of wages, 8d. or 8½d. an hour, to arbitration, and during the conference the employers made a counter offer that the arbitration should be on 8d. or 8½d. an hour; whether the men should start at 7 o'clock a.m. or at 7.30; whether the masters should be empowered to employ men on jobs over the three miles limit, the men to pay their own lodgings and railway fare. The latter part of the offer, it is stated, would necessitate an alteration of the men's rules, and would also mean a reduction in wages of from 5s. to 7s. a week.

PAINTERS' STRIKE, CARDIFF.—The Cardiff Operative Painters came out on strike on the 1st inst. They claim an advance of wages from 8d. to 9d. per hour. The Masters' Association refuse the advance, although several masters have conceded it.

LEGAL.

ST. CLEMENT DANES BUILDING DISPUTE.

MR. JUSTICE BYRNE, in the Chancery Division on the 30th ult., delivered a considered judgment in the case of the "Financial Times," Ltd., *v* George Bell & Sons, an action by the plaintiff company, the lessees of buildings used as printing works and offices, known as "Newspaper Buildings," in the parish of St. Clement Danes, for an injunction to restrain defendants from erecting any building so as to darken, hinder, or obstruct the free access of light to certain windows in the plaintiffs' premises which overlooked the defendants' land. The short facts were these:—The defendants, in February, 1902, acquired a plot of land on the north-eastern side of Gilbert-street, opposite plaintiffs' premises, and proceeded to erect thereon a block of buildings over 50 ft. high, which it was admitted would, when completed, materially interfere with the light of the plaintiffs' premises. The plaintiffs' title to their premises was as follows:—The late Mr. Douglas Gordon MacRae, the founder of the "Financial Times," and the largest shareholder in the company, on May 30, 1896, entered into an agreement with the trustees of a voluntary settlement executed by him to build certain printing works, shops, and offices on the site of the plaintiff company's present printing works, the agreement being that upon the completion of the buildings the lessors (the trustees) should grant him a lease of the premises for a long term of years at a rent of 260*l.* per annum. After he had commenced building, MacRae was threatened with litigation by the trustees of King's College Hospital, who were the owners of some vacant land on the north-eastern side of Gilbert-street, and to prevent this MacRae purchased the fee simple of the land for 10,000*l.*, and the hospital trustees conveyed it to him in January, 1897. On April 6 of that year MacRae, who was managing director of the plaintiff company, agreed to sell to his company his equitable right to a lease of the printing works, &c., under the building agreement, at a price which recouped him the expenses he had incurred in the acquisition of and in the construction of the premises, together with interest at the rate of 5 per cent. per annum on the outlay. In July, 1897, the company completed the purchase, and went into possession of the premises. In February, 1898, the trustees of the settlement, at the request of MacRae, granted the lease of the premises in the manner provided for in the building agreement of May 30, 1896. In November, 1902, the plaintiff company commenced the present action, their contention being that as MacRae was the freeholder of the vacant land on the north-eastern side of Gilbert-street at the time of the alleged agreement of April 6, 1897, he and the persons claiming under him were under an implied obligation not to build on the vacant piece of land so as to interfere with the access of light to the windows in the plaintiff's premises overlooking the vacant land as the same was enjoyed at the dates of the alleged agreement and lease. The executors of MacRae in February, 1902, sold the westernmost portion of the plot of vacant land in Gilbert-street to defendants who are the well known publishers, and it was on this plot of land that the buildings complained of were being erected. The case was heard by his lordship on April 2 and 3 last, when his lordship reserved judgment.

Mr. Justice Byrne, in delivering judgment, said it was not necessary for him to determine to what extent the doctrine of implied grant, or non-derogation from grant, applied to equitable interests, because in the present case, on the facts, he did not think the plaintiffs had established the right they claimed. He came to the conclusion on the evidence that MacRae was not the agent for the plaintiff company in entering into the building agreement, or in building, and that he did not become their agent in April, 1897. There was evidence to show that MacRae meant to utilise the land he purchased from the hospital trustees for 10,000*l.* for building purposes. He came to the conclusion that there was no express grant of any right to the access of light by MacRae to the plaintiffs, and no contract or bargain by MacRae with the plaintiffs to keep his land free from buildings and not to sell. He thought the plaintiffs had made out no case entitling them to relief, and dismissed the action with costs.

His lordship granted defendants an inquiry as to the damages suffered by them by the stay of their building operations pending the hearing of the action.

Mr. Levett, K.C., and Mr. Beebee appeared for the plaintiff company and Mr. Rowden, K.C., and Mr. St. John Clerke for the defendants.

POINT UNDER SECTION 22 OF THE PUBLIC HEALTH ACT, 1875.

MR. JUSTICE SWINFEN EADY, in the Chancery Division, on the 1st inst., concluded the hearing of the case of Faber *v.* the Gosforth Urban District Council, an action by the plaintiffs for a declaration that they were entitled, under Section 22 of the Public Health Act, 1875, to connect their proposed sewers with the sewer of the Council.

It appeared that the plaintiffs, as trustees under the will of one Montague, prepared a scheme for the development of an estate belonging to the testator at Kenton, in Northumberland, as a building estate. The plaintiffs divided the estate into lots, which they proposed to sell for the erection of a number of houses upon the estate, and to construct sewers for the purpose of taking the sewage from the houses so erected. The sewer, which was vested in the defendants as the Local Authority under the Public Health Act, 1875, was laid and constructed to a point in Kenton-lane, close to the south-west of the estate in question. Section 22 of the Act enacts that the owner or occupier of any premises without the district of the Local Authority may cause any sewer or drain from such premises to communicate with any sewer of the Local Authority on such terms and conditions as may be agreed on between such owner or occupier and such Local Authority, and that any dispute between the parties may be settled at the option of the owner or occupier by a Court of Summary Jurisdiction or by arbitration in the manner provided by the Act. The case came before the learned Judge as a motion for judgment on admissions in the pleadings.

At the conclusion of the arguments of counsel, his lordship, in giving judgment, said that the plaintiffs' plans of the proposed buildings showed sewers of different dimensions, ranging from 9 in. to 18 in. in diameter, and plaintiffs' case was that they were entitled under Section 22 of the Act, as the owners of premises, which were within the Castle Ward district, to connect their 18-in. sewer with the defendants' sewer—that was to the sewer of an adjoining Urban District. On February 14, 1903, the defendants' solicitors wrote to the plaintiffs that the connexion of such a series of sewers as was shown on the plan with the Gosforth sewer was altogether outside the scope of Section 22 of the Act, and could not be forced upon the defendant Council without their consent, and that if the plaintiffs insisted upon going to arbitration, the Council would appoint an arbitrator under protest, and reserve their right to raise this contention at every point in the proceedings. Plaintiffs afterwards started the present action. No houses had yet been built, nor had any drains been constructed. The plans showed a large system of sewers, and if the works were carried out according to the plan, the result must be that a large volume of sewage would be sent down the Gosforth sewer. In these circumstances he was not prepared to make the declaration asked for, which might have the effect of hampering any arbitrator or Court of Summary Jurisdiction. The only order on the motion would be that the Court did not think fit to make any such declaration as the plaintiffs asked for. There would be liberty to apply as to payment of costs on the conclusion of any proceedings which might be taken under the provisions of Section 22 of the Act.

Mr. Mcmorran, K.C., and Mr. Waddy appeared for the plaintiffs; and Mr. Scott Fox, K.C., and Mr. Gatey for the defendants.

CASES UNDER THE LONDON BUILDING ACT.

AN appeal under the London Building Act against a notice of objection by the District Surveyor of Clerkenwell was heard on the 17th ult. by Mr. D'Eyncourt at the instance of the architect, Mr. G. Hamilton Briggs, who had sent the District Surveyor a notice "to erect a domestic building to be used wholly or principally as offices and counting-houses within the meaning of Section 39, the building comprising shop and basement used for business purposes, with two stories of living accommodation over, according to the plans submitted to you." The new building was intended to be erected on a part of the present site of No. 77, Chapel-street, at the junction with Suffolk-street. The District Surveyor served a notice to provide an open space in the rear. The architect objected to this, and contended that as the cubical contents of the business portion was in excess of the remainder, and was greater in superficial area, no air space in the rear was necessary. Mr. Reed, instructed by Mr. Yates, appeared for Mr. G. H. Briggs, and Mr. Andrews, of the London County Council, represented the District Surveyor. The Magistrate affirmed the District Surveyor's objection, and awarded two guineas costs.

A CASE under the London Building Act of 1894 came before Mr. Alderman Alliston at the Guildhall on the 30th ult. The prosecution was at the

instance of "the Mayor and Commonalty and Citizens of the City of London," for whom Mr. T. G. Vickery appeared, and Messrs. W. Norman Higgs, Stanley Higgs, and Chas. S. Barber Higgs were the defendants, and were represented by Mr. Joseph, barrister.

The matter arose out of the great Barbican fire in April of last year, and Mr. Vickery explained that the summonses were taken out under the 109th and 116th Sections of the Act, and were for the recovery of 570*l.* 10s. 3d., the amount of expenses incurred by the Corporation in respect to certain dangerous structures in Barbican and New Zealand-avenue, which were rendered dangerous by the Barbican fire of 1902. All were burned down and in ruins, and immediate steps had to be taken by the District Surveyor to render them safe.

The Chief Clerk pointed out that there ought to have been a separate summons in respect of each separate building.

Mr. Joseph intimated that that was one of his points.

Mr. Vickery: But it was rendered necessary by one event. I am informed that the defendants are acting for trustees.

It was subsequently decided to deal only with the case of 63, Barbican, upon which 75*l.* odd had been expended.

Mr. Vickery said, to put it very shortly, the points involved in the case which the Court was asked to decide were two, and they were of some importance on account of the whole matter in question. He would remind the Court that the sum was not an amount that he was asking for to pay the Corporation, but which was to be refunded for expenses incurred under a statutory obligation. The first question was, were they the owners? and the second, were the expenses properly incurred? and that involved the whole and sole character and nature of the works. He referred the Bench to the question of ownership as described by the Act, a definition which had been judicially expressed in several cases. The defendants held the premises under a lease from St. Bartholomew's Hospital, and they sublet portions of their premises under leases to persons in occupation. Section 109—the particular Section under which the summons was taken out—provided that all expenses incurred by the Council or Corporation in relation to the obtaining of any order should be paid by the owner of the structure.

Mr. Savill (Chief Clerk): Was any order obtained?

Mr. Vickery said he would speak as to that later on. In Section 103 provision was made for the apportioning of expenses amongst the different owners, and he submitted that the defendants were owners. The next point was as to whether the expenses were properly incurred. In the case where a structure was unsafe, the Corporation Surveyor—in this case Mr. Martin Saunders—would be expected to survey and report, and he did this the day after the fire. Thereupon the Corporation, under Section 104, required him to survey the premises, and give his certificate. The premises were shored up, and "otherwise secured" for the protection of passengers, and notice served on the occupiers to attend to the safety of the public, and the police-court could make an order to enforce this. In this case, however, no order had been made or applied for. The Surveyor had in this case certified, and he was ordered to shore up, &c., and notice was served on the premises.

The Clerk: And if they did not comply with the notice you ought to come for an order.

Mr. Vickery said the shoring would have been impossible if some part of the building had not been taken down. The question arose whether he was entitled to do more than he did without an order of the Court. No more "taking down" was done than was absolutely necessary for the physical shoring up and protection of the workmen engaged, to say nothing of the people passing. The streets were blocked, and the District Railway Co. complained. The question raised by the defence was whether the Corporation had done more than they had power to do.

The Alderman: "And carrying the order into effect."

Mr. Vickery: I read it as carrying the Section into effect. If it had toppled over on anybody, who would have been responsible? Why, the District Surveyor, and he took precautions.

The Alderman was doubtful whether Section 109 applied, inasmuch as no order had been obtained, nor had any attempt been made to obtain one.

Mr. Joseph observed that there was plenty of time to obtain one.

The Alderman: I may say at once that it is not recoverable under Section 109. You must proceed under 116.

Mr. Vickery said it was not intended by the Act that the expenses should be paid by the ratepayers, and unless they could be recovered by the Corporation that body would be out of pocket unless the owners paid and rendered an order unnecessary.

Under Section 116 a test case was taken in respect of 5, New Zealand-avenue, 77*l.* 7s. 10d. being claimed.

The Surveyor gave evidence as to giving orders for the work to be done by Messrs. Mowlem, and in answer to the Clerk said no application was made for an order under the Dangerous Structures Act. He had heard that the Governors of St. Bartholomew's Hospital had consented to be responsible for any such demand in case of fire, but he did not know that a claim had been made on the Surveyor of St. Bartholomew's.

Mr. Joseph contended that it was necessary that an order should have been obtained in order to bring the owner within the meaning of Sections 102 to 116. The prosecution had taken an entirely erroneous view of their rights under the Act of Parliament. The Surveyors had acted without consulting any legal authority, who would have told them that it was clear that they were not entitled to do the work without getting an order from a petty sessional court.

The fire took place on April 21, and these became dangerous structures, and the Surveyors' duties were to at once notify the owners. There was clearly no power to take down without an order of the Court, as was shown by Section 106. There was another matter: before the notice was served orders had been given to Messrs. Mowlem to do the very work the defendants were required to do under the notice. The work would certainly have been done by St. Bartholomew's, and not foisted upon the defendants, in accordance with the covenant.

Mr. Alderman Alliston said he need hardly say this was a matter of great importance. The facts and evidence showed that at least six or seven days elapsed before anything was done. He thought the complainants should have obtained the order at a summary court of jurisdiction at first, and to his mind there was plenty of time for this, and under the circumstances, if such an application had been made, it would have been granted. No order had been applied for or obtained. He did not think the costs would be recoverable under Section 109; neither did he think they would be recoverable under Section 116. The summonses would therefore be dismissed.—*Morning Advertiser.*

POLLUTING A RIVER.

MR. HENRY CRANE, contractor, of Crane's Wharf, Dace-road, Bow, was summoned at Worship-street by the Stepney Borough Council for infringing a by-law made by the Council under the Public Health Act by allowing refuse to remain on his wharf more than twenty-four hours. Mr. Young, solicitor for the Stepney Council, said the by-law became operative where the collection of refuse was within ten yards of a street or highway, and twenty yards of any dwelling. Mr. Crane was a contractor for street cleaning, and was found to have on the wharf many tons of street and stable refuse, slop, and garbage. That was undoubtedly the accumulation of weeks; its smell was most offensive, and the slop and manure was draining into the Lea. Besides the pollution of the water, the collection was within five yards of dwelling-houses, and abutted on a street. Dr. Alexander, Medical Officer of Health, said the matter remained on the wharf till April 20. It made him sick from the odour.

Mr. Tilley, for the defence, said defendant did not know the mass had accumulated, and would prevent its recurrence.

Mr. Dickinson imposed a fine of 5*l.* and 23s. costs.—*Daily News.*

PATENTS OF THE WEEK:

APPLICATIONS PUBLISHED.*

19,769 of 1902.—G. H. BERNASCONI and F. W. BAKER: *Manufacture of Ornamental Glazing Sheets or Lights.*

An imitation leaded glazing sheet or light formed by fusing on to one or both sides of a plain or coloured glass sheet, outlining and ornamenting bars and edges which are composed of suitably coloured fusible substance, the said bars and edges becoming thereby part of, or in one solid piece with, the glass sheet.

23,357 of 1902.—J. BARR and R. ANDERSON: *Electrically-driven Surface Planing and Jointing Machines for Wood and the Like.*

This consists in the combination of parts constituting an electrically-driven surface planing and jointing machine for wood and the like, comprising the application of an endless rope drive having the electric motor underneath and a revolving cutter block overhead.

10,941 of 1902.—H. C. GOVER: *Venetian or Such Like Blinds.*

A venetian or like window blind composed of laths secured to chain links fitted within tubes or grooves on each side of the window and adapted upon raising the blind to assemble the laths successively at the upper instead of the lower end thereof.

12,327 of 1902.—E. A. SHOWELL: *Casement Stays or Fasteners.*

This invention relates to casement stays or fasteners. To the movable casement is secured a bracket to which is jointed the one end of a rod. At a short distance from the said joint this rod is jointed in itself, with its axis preferably at right angles to its jointing with the bracket. A second bracket is provided for attachment to the casement frame or fixture, having a base-plate formation with screw holes, and an angular arm proceeding therefrom upon which is pivotally mounted a socket through which the rod travels. This socket is provided with a binding set-pin, so that the rod may be fixed at any point therein. Thus, as the casement is opened, the rod travels through the socket of the angular bracket to the desired extent, when by means of the said pin it may be secured in that position. When the rod is drawn home (inwardly), the joint in the rod permits the longer end of the rod to fall down out of the way.

1,487 of 1903.—A. E. HUBERT and W. EDWARDS: *Improved Hermetically Sealed Tester for Locating Leakages in Drain and Other Conduits.*

This consists of a rubber sheath and paper envelope for containing chemicals, which envelope is broken by two compressed springs on the paper, under the action of moisture when drawn through the drain-pipe, becoming too weak to withstand them. The chemicals employed are then scattered in the pipe, and the scent or odour will circulate through, "and, should any defects exist therein, the leakage can be readily detected by the smell of the chemical used."

8,602 of 1902.—W. J. Matthews: *Machine for Making Bricks.*

This consists of a method wherein more bricks than one may be compressed at the same time, using the air to form a division line between the bricks. It further consists in utilising the friction on the sides of the mould to form the resistance to compress the loose clay, shale, and the like.

27,569 of 1902.—J. KRAUS: *Apparatus for Reducing or Grinding Materials in a Wet State.*

An apparatus for reducing and grinding materials in a wet state and with continuous or intermittent influx and efflux of the material, distinguished by this: that the efflux of the reduced material is done by a pipe inserted centrally at one end into the reducing drum, and which pipe does not turn round with the drum.

3,294 of 1903.—J. PURVIS and T. ROUSE: *Manufacture of Artificial Stone.*

A process for preparing lime concrete suited for the manufacture of artificial stone by mixing the unslacked lime with sand, gravel, or fragments of stone or other suitable hard material, and during the mixing moistening the mixture with steam.

10,736 of 1902.—L. REDMAYNE: *Adapting Coal Ovens for Gas Cooking.*

This consists in an attachment to coal ovens to adapt them for gas cooking, the said attachment forming a strip or strips and top to the oven door.

10,853 of 1902.—M. WILLIAMS: *Process of Roasting or Calcining Raw Materials from which Portland Cement and Cements of Similar Character are Manufactured, Ores and Minerals, and the Kilns or Furnaces used in the Process.*

This consists of a method of introducing air, gas, or steam through and over the whole or any part of the floor or roof of kilns or furnaces for calcining or roasting ores and minerals, and the material from which Portland cement is made, by a series of inlets.

* All these applications are in the stage in which opposition to the grant of Patents upon them can be made.

MEETINGS.

FRIDAY, MAY 8.

Surveyors' Institution.—(Dublin meeting, continued)—Parties will leave Dublin on the following excursions:—(1) Single day. To Powerscourt House, by permission of Viscount Powerscourt, K.P. (2) Single day. To Albert Agricultural College, Glasnevin, by permission of the Department of Agriculture. (3) Occupying about three days. To Belfast and Giant's Causeway. (4) Occupying about three days. To Cork, Glengariff, and Killarney.

SATURDAY, MAY 9.

St. Paul's Ecclesiological Society.—Visit to the Church of St. Bartholomew the Great, under the guidance of Mr. E. A. Webb, F.S.A. Meeting in the church at 2.30 p.m.

Northern Architectural Association.—Excursion Meeting. The Laing Art Gallery and Byker Police and Fire Brigade Station will be visited.

MONDAY, MAY 11.

Royal Institute of British Architects.—Second smoking "At Home."

Society of Arts (Cantor Lectures).—Mr. W. W. Beaumont on "Mechanical Road Carriages." III. 8 p.m.

Bristol Society of Architects.—Mr. A. P. I. Cotterell on "Sewage Treatment for Isolated Blocks of Buildings and Country Houses, &c."

TUESDAY, MAY 12.

Royal Institution.—Professor G. H. Darwin on "The Astronomical Influence of the Tides. I. 5 p.m.

WEDNESDAY, MAY 13.

Institute of Sanitary Engineers, Ltd.—General Committee at 4.15 p.m.; Election Committee at 5.15 p.m.; Council meeting at 7 p.m.

THURSDAY, MAY 14.

Institution of Electrical Engineers.—Adjourned discussion on (1) Mr. A. D. Williamson's paper on "Applications of Electricity in Engineering and Shipbuilding Works." (2) Mr. A. B. Chatwood's paper on "Electric Driving in Machine Shops." 8 p.m.

FRIDAY, MAY 15.

Architectural Association.—Members' supper, at the Hotel Great Central, Marylebone-road, 7.30 p.m.

SATURDAY, MAY 16.

Edinburgh Architectural Association.—Visit to Stirling (to Castle and Church).

SOME RECENT SALES OF PROPERTY:

ESTATE EXCHANGE REPORT.

April 18.—By G. B. HILLIARD & SON (at Burnham-on-Crouch).

Burnham-on-Crouch.—Main rd., five building plots, f. £670

April 21.—By R. H. LUSCOMBE & SONS (at Kingsbridge).

South Milton, Devon. — Hollwell Farm, 82¾ acres, f. 2,830

By W. BROWN & Co. (at Cheddington).

Cheddington, Bucks. — Main st., freehold house with three orchards, area 2 acres, y.r. 40*l.* 790

Main street, freehold house and four cottages with two orchards, area 1 acre, y.r. 39*l.* 14s... 550

By JAMES T. PEAT (at Reigate).

Reigate, Surrey.—27 to 33 (odd), South-rd., u.t. 66 yrs., g.r. 8*l.*, w.r. 62*l.* 8s. 650

Redhill, Surrey.—37, 39, and 41, Warwick-rd, u.t. 43 yrs., g r. 2*l.*, w.r. 49*l.* 16s. 350

April 22.—By J. E. JAMES (at Aberayron).

Llanarth, Cardigan. — Nantgwynfynydd-issaf estate, 274 a., f., y.r. 129*l.* 13s. 2,800

April 23.—By W. H. SHINER & WINTER (at Bristol).

Butcombe, &c, Somerset.—Sage's Farm, 61 a. 2 r. 5 p., f. 2,800

Rusling Farm, 67 a. 2 r. 1 p., f. 1,900

By ANDREW & SON (at Plymouth).

Newton Ferrers, &c., Devon.—Brownstone Farm, 176 a. 1 r. 7 p., f. 3,400

April 24.—By VERNON & SON (at High Wycombe)

West Wycombe, &c., Bucks.—Huckenden Farm, 105 a. 2 r. 9 p., f., y.r. 100*l.* 1,725

Stokenchurch, Bucks. — Cooper's Court Farm, 121 a. 3 r. 33 p., f., e.r. 125*l.* 1,925

Princes Risborough, Bucks.—Speen Farm, 145 a. 2 r. 15 p., f., y.r. 90*l.* 1,775

By REYNOLDS & EASON.

Paddington.—11, 14, and 17, London-st. (S.), u.t. 46½ yrs., g.r. 60*l.*, y.r. 300*l.* 3,695

Barnes.—Lilian-rd., f.g.r.'s 15*l.*, reversion in 64 and 70 yrs. 390

Merthyr-ter., f.g.r.'s 20*l.*, reversion in 80 yrs. .. 520

Teddington.—Wolsey-villas, f.g.r.'s 20*l.*, reversion in 67 yrs. 600

Little Ilford.—92, Chesterford-rd., u.t. 96 yrs., g.r. 5*l.* 5s., p. 125

By RIDER & SONS.

Westbourne Park.—54, 56, 58, and 60, Tavistock-cres., u.t. 76½ yrs., g.r. 38*l.*, y.r. 300*l.* 6s. 1,720

By C. H. & J. W. WILLMOTT.

Hammersmith.—164, The Grove, u.t. 80 yrs., g.r. 10*l.*, y.r. 40*l.* 525

Shepherd's Bush.—5, Ethelden-rd., u.t. 78 yrs., g.r. 6*l.* 10s., y.r. 42*l.* 445

By WILTSHIRE & THURGOOD.

Lee.—Old-rd., Manor Lodge, f., e.r. 100*l.* 1,100

April 27.—By ELLIOTT, SON, & BOYTON.

Oxford-st.—No. 213 (Circus Restaurant), f., y.r. 410*l.* 18,000

Nos. 215, 217, and 219 (S), f., y.r. 500*l.* 35,950

Nos. 221 and 223 (S), f., y.r. 540*l.* 26,200

By DRIVERS'.

Holloway.—120, Alexander-rd., u.t. 60 yrs., g.r. 6*l.* 6s., y.r. 32*l.* 300

99, St. James's-rd. (S), u.t. 40¾ yrs., g.r. 6*l.*, w.r. 55*l.* 18s. 230

Finsbury Park.—67, Lennox-rd., u.t. 61¾ yrs., g.r. 6*l.*, w.r. 59*l.* 16s. 320

14, Athelstane-rd., u.t. 61¾ yrs., g.r. 5*l.*, w.r. 47*l.* 9s. 250

7, Osborne Gr., u.t. 63¼ yrs., g.r. 5*l.* 5s., w.r. 39*l.* 280

Stroud Green.—28 and 30, Mount Pleasant-rd., u.t. 64½ yrs., g.r. 8*l.*, y.r. 64*l.* 635

Holloway.—34, Tollington pl., u.t. 76 yrs., g.r. 9*l.* 9s., e.r. 46*l.* 350

By DUNCAN & KIMPTON.

Highgate.—1, Holly Lodge-villas, u.t. 46 yrs., g.r. 3*l.*, e.r. 50*l.* 560

By FULLER, MOON, & FULLER.

Ewell, Surrey.—Epsom-rd., Hollycroft, and 1 a. 1 r. 32 p., f., y.r. 70*l.* 1,520

Epsom-rd., Hessle House, and 6 a. 2 r. 21 p., f., y.r. 225*l.* 5,000

Epsom-rd., a block of freehold building land, area 35 a. 0 r. 32 p., with six cottages thereon, y.r. 145*l.* 16s. 4d. 7,100

West-st., freehold allotment gardens, area 0 a. 3 r. 18 p., w.r. 3*l.* 4s. 300

West-st., Gibraltar Cottages (3), area 0 a. 1 r. 32 p., f., w.r. 3*l.* 4s. 510

West-st., freehold building land, 19 a. 0 r. 3 p., y.r. 63*l.* 18s. 4d. 5,000

Chessington-rd., freehold building land, 3 a. 1 r. 18 p. 1,070

1, 2, and 3, Old School Cottages, f., w.r. 30*l.* 12s. 440

Ruxley-la., Ruxley Farm, 225 a. 0 r. 26 p., f., y.r. 192*l.* 10,800

Reigate-rd., North Looe Farm, 184 a. 3 r. 23 p., f., y.r. 205*l.* 10,100

By NICHOLAS DENYER, & Co.

Bidborough, Kent.—Ridgeholm, f., p. 900

Highgate.—15, High-st. (S), u.t. 79 yrs., g.r. 14*l.*, y.r. 63*l.* 725

Enfield.—5 and 8, Churchbury-ter. (S), u.t. 74½ yrs., g.r. 14*l.* 14s., y.r. 70*l.* 700

By SCOBELL & LAKE.

Paddington.—108 and 110, Church-st. (S), u.t. 18 yrs., g.r. 10*l.*, y.r. 90*l.* 440

St. John's Wood.—77 and 79, Henry-st. (S), u.t. 14¼ yrs., g.r. 5*l.*, y.r. 94*l.* 420

By A. H. TURNER & Co.

St. James's.—5, St. James's-st., area 2,000 ft., f., p. 16,750

April 28.—By BROAD, WILTSHIRE, & PENNY.

Hornsey.—1, Burghley-rd., u.t. 76 yrs., g.r. 6*l.* 6s., y.r. 40*l.* 380

By DAVID BURNETT & Co.

City of London.—52, St. Mary Axe (S), f., y.r. 200*l.* 5,110

7, Snow Hill and 1, Cock-la. (warerooms, &c.), u.t. 52 yrs., g.r. 200*l.*, y.r. 685*l.* 3,700

1, Creechurch-la. (warehouse), area 500 ft., u.t. 70¾ yrs., g r. 70*l.*, y.r. 250*l.* 2,200

3, Creechurch-la. (warehouse), u.t. 76½ yrs., g r. 75*l.* 0s. 6d., e.r. 250*l.* 1,860

Chelsea.—15 and 17, Margaretta-ter., u.t. 32¾ yrs., g.r. 15*l.* 13s. 9d., y.r. 96*l.* £745

By CHAMBERS, GIET, & FORD.

Dalston.—41, Brownlow-rd., u.t. 42½ yrs., g.r. 5*l.*, y.r. 32*l.* 350

By PERCY H. CLARKE.

Fulham.—24, Moore Park-rd., u.t. 41½ yrs., g.r. 5*l.*, w.r. 31*l.* 4s. 225

By C. W. DAVIES & SON.

Islington.—2, Milner-st., u.t. 24½ yrs., g.r. 9*l.*, e.r. 55*l.* 355

10, Rochffe-st., u.t. 35½ yrs., g.r. 6*l.*, y.r. 32*l.* .. 280

101 and 103, Windsor-st., u.t. 23½ yrs., g.r. 6*l.* 13s. 4d., w r. 52*l.* 205

Holloway.—1, Hungertord-rd., u.t. 51 yrs., g.r. 9*l.*, e.r. 65*l.* 530

Commercial-rd. East.—53, 55, and 57, Greenfield-st., f., w.r. 179*l.* 8s. 1,003

Finchley.—9 and 10, Park-ter., f., y.r. 49*l.* 6s. .. 620

By DEBENHAM, TEWSON, & Co.

Cricklewood.—3, Ashford-rd., u.t. 85½ yrs., g.r. 5*l.*, y.r. 34*l.* 350

9 to 12, Ashford-rd., u.t. 98½ yrs., g.r. 19*l.* 10s., y.r. 142*l.* 1,345

14, Pine rd., u t. 91 yrs., g.r. 4*l.* 19s., y.r. 36*l.* . 405

2, 4, 6, and 8, Mora-rd., u.t. 98½ yrs., g.r. 18*l.*, w.r. 145*l.* 12s 1,010

Wembley, Middlesex.—12 to 15, Totnes-ter., u.t. 96 yrs., g.r. 26*l.*, y.r. 92*l.* 635

Upton Park.—208, Boleyn-rd., f., w.r. 28*l.* 12s. .. 335

Peckham.—Whittington-rd., f.g.r's. 44*l.*, reversion in 41 yrs. 1,150

By A. PREECE & SON.

St. John's Wood.—17, Boundary-rd., u.t. 34½ yrs., g.r. 8*l.*, y.r. 80*l.* 750

39, Loudoun-rd., u t. 34½ yrs., g.r. 9*l.*, y.r. 70*l.* 650

Leytonstone.—88, Birkbeck-rd., u.t. 65 yrs., g.r. 4*l.* 4s., y.r. 26*l.* 255

Holloway.—60, Hanley-rd., u.t. 67¼ yrs., g.r. 8*l.*, y.r. 42*l.* 395

25, Parkhurst-rd., u.t. 49 yrs., g.r. 8*l.* 10s., y.r. 55*l.* 525

By E. SIMPSON.

New Cross.—157, Pepys-rd., u.t. 62½ yrs., g.r. 6*l.* 6s., y.r. 38*l.* 525

By F. WARMAN.

Highbury.—71, Sotheby-rd., u.t. 78 yrs., g.r. 10*l.* 10s., e.r. 60*l.* 700

57, Witherington-rd., u.t. 81 yrs., g.r. 8*l.* 2s. 6d., e.r. 48*l.* 500

111 and 113, Sotheby-rd., u.t. 85½ yrs., g.r. 15*l.*, y.r. 104*l.* 1,290

By WESTON & SONS.

Clapham.—57, Fentiman-rd., u.t. 23½ yrs., g.r. 7*l.* 10s., e.r. 43*l.* 300

17 to 23 (odd), Claylands-rd., u.t. 20 yrs., g.r. 16*l.* 2s., y.r. 144*l.* 1,155

Battersea.—67, 69, and 71, Savona-st., f., y.r. 78*l.* 900

Camberwell.—41, Herne Hill-rd., u.t. 70 yrs., g.r. 7*l.*, y.r. 42*l.* 400

By BELLAMY & Co. (at Walham Green).

Fulham.—93, 95, and 97, Estcourt-rd., u.t. 55 yrs., g.r. 6*l.* 12s. 6d., w.r. 83*l.* 4s. 680

12, Walham-av., u.t. 76½ yrs., g.r. 6*l.*, w.r. 35*l.* 2s. 132

By JAMES T. PEAT (at Crawley).

Crawley, Sussex.—Springfield-rd., a freehold residence, e.r. 25*l.* 400

West-st., six freehold cottages, w.r. 67*l.* 12s..... 900

Horsham-rd., 1 and 2, Sunnyside, f., y.r. 32*l.* 6s. 500

By HUMBERT & FLINT (at Watford).

Watford, Herts.—251, High-st. (formerly the Angel), f., p. 600

April 29.—By BEARD & SON.

Bloomsbury.—14, Tavistock-pl., u.t. 26½ yrs., g.r. 45*l.*, y.r. 130*l.* 650

51, Hunter-st., u.t. 28 yrs., g.r. 50*l.*, y.r. 130*l.* .. 550

Paddington.—13, South Wharf-rd., u.t. 18½ yrs., g.r. 5*l.*, y.r. 36*l.* 185

St. Pancras.—92, Euston-st., u.t. 16½ yrs., g.r. 17*l.* 17s., y.r. 40*l.* 100

Ealing.—33, Ranelagh-rd., u.t. 64 yrs., g.r. 5*l.* 10s., q.r. 45*l.* 460

Ranelagh-rd., a plot of freehold land, p. 130

By MAY & PHILPOT.

Kensington —14, Fielding-rd., u.t. 74 yrs., g.r. 12*l.*, e.r. 55*l.* 475

By MOSS & JAMESON.

Blackheath.—55, St. John's Pk., u.t. 79 yrs., g.r. 6*l.*, y.r. 40*l.* 365

By RUSHWORTH & STEVENS.

Notting Hill.—Holland Park-av., f.g.r. 40*l.*, reversion in 59 yrs. 1,300

Forest Gate.—Latimer-rd., f.g.r.'s 40*l.*, reversion in 75 yrs. 1,010

Woolwich, Kent.—3, 4, and 5, Beresford-st., f., w.r. 65*l.* 16s. 1,015

Samuel-st., f.g.r. 1*l.* 12s., reversion in 2¾ yrs. .. 250

16, Parson's Hill, f., y.r. 40*l.* 880

32 and 34, Parson's Hill (wheelwright's premises), f., y.r. 26*l.* 620

Parson's Hill, f.g.r. 15*l.*, reversion in 40 yrs. .. 415

Plumstead, Kent. — Wrottesley-rd., f.g.r. 13*l.* 16s. 9d., reversion in 65 yrs. 360

76, Plumstead Common-rd., f., q.r. 32*l.* 670

By JOSEPH STOWER.

Paddington.—59, Woodchester-st., u.t. 49 yrs., g.r. 5*l.*, y.r. 65*l.* 300

32, 34, and 42, Hampden-st., u.t. 41½ yrs., g.r. 15*l.*, y.r. 92*l.* 780

Westbourne Park.—71, Barnsdale-rd., u.t. 59½ yrs., g.r. 7*l.*, y.r. 45*l.* 500

By R. TIDEY & SON.

Commercial-rd. East.—32, 34 and 36, Rhodeswell-rd., f., w.r. 114*l.* 8s. 1,105

Bethnal Green.—1 to 8, Cordova-rd., u.t. 45½ yrs., g.r. 36*l.* 16s., w.r. 309*l.* 8s. 1,605

Holloway.—7, Chalfont-rd., u.t. 31 yrs., g.r. 8*l.*, y.r. 26*l.* 135

By RAWLINS & Co.

Clerkenwell.—4, Great Bath-st., f., y.r. 28*l.* 600

15, Great Bath-st. (S), f., y.r. 50*l.* 820

Crawford-pl., &c., f.g.r. 227*l.*, reversion in 9 yrs. 4,800

30, Great Bath-st. (S), and 4 and 5, Bath-court, area 1,300 ft., f., y.r. 40*l.* 1,000

17, Great Bath-st., and 6 and 6½, Baker's-row, area 1,750 ft., f., y.r. 69*l.* 1,300

28 and 29, Great Bath-st., area 2,050 ft., f., y.r. 80*l.* 2,170

24 and 26, Great Bath-st. (S.), f., y.r. 57*l.* 1,220

31 and 33, Warner-st. (S.), f., y.r. 85*l.* £1,470

26 and 28, Warner-st., area 2,150 ft., f., y.r. 170*l.* 1,630

43, Warner-st., and 23, Baker's-row, area 2,800 ft., f., y.r. 65*l.* 1,425

12 to 26 (even), Mount Pleasant (S.), area 8,200 ft., f., y.r. 205*l.* 8,100

By WINDRUM & CLEAVE.

Poplar.—26, 28, and 30, High-st. (S), u.t. 64 yrs., g r. 15*l.*, w.r. 89*l.* 14s. 405

By WINKWORTH & Co.

Mayfair.—73, Mount-st., u.t. 82½ yrs., g r. 114*l.*, p. 17,000

By DOWSETT, KNIGHT, & Co. (at Sidcup).

Sidcup, Kent.—Halfway-st., &c., seven plots of freehold building land 665

April 30.—By FITCH & CLABBURN.

South Kensington.—24, Fawcett-st., u.t. 45½ yrs., g.r. 9*l.*, y.r. 55*l.* 540

19, Kempsford-gdns., u.t. 63 yrs., g.r. 6*l.*, y.r. 52*l.* 510

Fulham.—27 and 29, Tilton-st., u.t. 83 yrs., g.r. 10*l.* 10f., w.r. 83*l.* 4s. 405

By NEWBON, EDWARDS, & SHEPHARD.

Hometon.—19 and 21, Oriel-rd., u.t. 59 yrs., g.r. 7*l.*, w.r. 70*l.* 4s. 545

11, 12, 13, 14, and 15, John-st., f., w.r. 78*l.* 740

Holloway.—57 to 65 (odd), George's-rd., f., w.r. 74*l.* 2s. 570

71, Tollington Pk., u.t. 62 yrs., g.r. 7*l.* 7s., e.r. 50*l.* 435

18 and 20, Elthorne-rd., u.t. 76 yrs., g.r. 11*l.*, w.r. 78*l.* 580

Camden Town.—24 and 25, Priory-st., u.t. 21½ yrs., g.r. 8*l.*, w.r. 81*l.* 18s. 360

Regent's Park.—Albert-st., f.g.r. 5*l.* 10s., reversion in 28 yrs. 275

St. John's Wood.—Beckett's-pl., i.g.r. 21*l.*, u.t. 14 yrs., g.r. nil 135

Hackney.—29, Cassland-cres., u.t. 42 yrs., g.r. 6*l.* 6s., y.r. 45*l.* 400

87, 89, and 91, Pritchard's-rd., u.t. 59 yrs , g.r. 17*l.* 5s., w.r. 122*l.* 4s. 820

42 and 44, Pritchard's-rd., u.t. 20 yrs., g.r. 10*l.*, w.r. 55*l.* 18s. 155

1 and 2, Globe-passage, u.t. 61 yrs., g.r. 11*l.*, w.r. 52*l.* 16s. 350

5 and 6, Emma-st., u.t. 57 yrs., g.r. 12*l.*, w.r. 83*l.* 4s. 450

Hampstead.—5 to 11 (odd), Cotleigh-rd., u.t. 79 yrs., g.r. 40*l.*, y.r. 166*l.* 2s. 1,450

Wood Green.—2 and 18, Mount View Villas, u.t. 98 yrs., g.r. 13*l.*, y.r. 72*l.* 700

6, Grosvenor Villas, u.t. 97 yrs., g.r. 6*l.* 10s., y.r. 35*l.* 350

1, Hillside Villas, u.t. 95½ yrs., g.r. 7*l.*, e.r. 45*l.* 400

Tottenham.—29 to 39 (odd), Cranleigh-rd., u.t. 84½ yrs., g.r. 33*l.*, y.r. 195*l.* 16s. 1,430

New Cross.—344, New Cross-rd., u.t. 26 yrs., g.r. 4*l.* 5s. 8d., y.r. 40*l.* 350

By FISHER, STANHOPE, & DRAKE.

Stoke Newington.—97, Bethune-road, u.t. 73½ yrs., g.r. 13*l.*, e.r. 80*l.* 850

76, Cazenove-rd., u.t. 73½ yrs., g.r. 13*l.*, e.r. 75*l.* 810

184, Lordship-rd., area ½ an acre, u.t. 19½ yrs., g.r. 7*l.* 10s., p. 600

Hackney.—164, Amhurst-rd., u.t. 63 yrs., g.r. 8*l.*, e.r. 52*l.* 570

By ROBINS, GORE, & MERCER.

Kentish Town.—61 and 67, Highgate-rd. (S), f., y.r. 130*l.* 1,965

By SELFE, BALL, SMITH, & Co.

Battersea.—5, Ilminster-gdns., u.t. 77 yrs., g.r. 8*l.*, y.r. 42*l.* 435

Twickenham.—2 and 5, The Cres., u.t. 79½ yrs., g.r. 18*l.*, y.r. 90*l.* 915

By STIMSON & SONS.

Dulwich.—11, Underhill-rd., f., e.r. 50*l.* 525

322 to 328 (even), Upland-rd., u.t. 76½ yrs., g.r. 30*l.*, y.r. 137*l.* 965

227, Friern-rd., u.t. 71¾ yrs., g.r. 6*l.* 10s., e.r. 35*l.* 310

233 and 235, Friern-rd., u.t. 76¼ yrs., g.r. 9*l.* 19s., y.r. 69*l.* 650

251 and 253, Friern-rd., u.t. 57½ yrs., g.r. 9*l.* 10s., y.r. 68*l.* 610

255 to 263 (odd), Friern-rd., u.t. 77 yrs., g.r. 30*l.* y.r. 172*l.* 1,140

48 to 54 (even) Heber-rd., u.t. 74½ yrs., g.r. 22*l.* 15s., y.r. 124*l.* 1,220

Peckham.—13 to 19 (odd), York-gr., u.t. 73¼ yrs., g.r. 21*l.*, y.r. 158*l.* 1,260

Old Kent-rd.—56 and 58, Tustin-st. (laundry and factory premises with stabling) f., y.r. 110*l.* 1,775

Chelsea.—Lots-rd., the Ashburnham Mews, area 8,500 ft., u.t. 73 yrs., g.r. 41*l.* 5s., y.r. 203*l.* 2,400

Holloway.—2, 4, 5, and 7, Brook-rd., u.t. 60 yrs., g.r. 22*l.*, y.r. 110*l.* 925

Hackney.—11 to 16, Palace-rd., u.t. 52½ yrs., g.r. 18*l.*, w.r. 156*l.* 1,054

44 to 48, Palace-rd., u.t. 52½ yrs., g.r. 15*l.* 15s., w.r. 104*l.* 705

Newington Butts.—16 and 18, Penton-pl., y.r. 102*l.* 12s.; also i.g.r. 18*l.*, u.t. 40½ yrs., g.r. 28*l.* 10s. 1,105

Clapham.—88, Sandmere-rd., u.t. 76 yrs., g.r. 8*l.* 15s., y.r. 40*l.* 400

Highgate.—8 and 10, Colva-st., u.t. 76½ yrs., g.r. 11*l.* 12s., w.r. 96*l.* 4s. 495

Twickenham.—Whitton-rd., Newstead, u.t. 94 yrs., g.r. 7*l.*, e.r. 40*l.* 425

By VARLEY & LOCKING.

Kingsland.—27 to 37 (odd), Dunston-st., u t. 16 yrs., g.r. 25*l.*, y.r. 222*l.* 14s. 670

Stamford Hill.—5, Daleview-rd., u.t. 56 yrs., g.r. 6*l.*, e.r. 34*l.* 270

May 1.—By BREADMORE & WEBB.

East Sheen, Surrey.—Upper Richmond-rd., the Wilderness, and 1 a. 1 r. 6 p., f. 2,250

Mortlake.—24, Lower Richmond-rd., f., y.r. 26*l.* 455

Kew, Surrey.—11, Cumberland-rd., u.t. 64 yrs., g.r. 12*l.*, e.r. 90*l.* 900

By BURTON, SMITH, & Co.

Streatham.—1 and 2, Evalina-ter., u.t. 93 yrs. y.r. 8*l.* 10s., w r. 65*l.* 360

Norwood.—62, Harold-rd., u.t. 75 yrs., g.r. 13*l.*, y.r. 80*l.* 740

7, 9, and 11, Highview-rd., u.t. 74 yrs., g.r. 34*l.* 10s., y.r. 146*l.* 1,050

By GILBERT & HOW.

Westminster.—10, 11, and 12, Kensington-pl., u.t. 16 yrs., g.r. nil, y.r. 56*l.*	£375
25, 37, and 39, Ponsonby-pl., u.t. 22½ yrs., g.r. 15*l.* 15s., y.r. 120*l.*	910
Pimlico.—6, Tachbrook-st., u.t. 46 yrs., g.r. 11*l.*, y.r. 80*l.*	740
Battersea.—144 and 150, Mallinson-rd., u.t. 78½ yrs., g.r. 13*l.*, y.r. 64*l.*	635

By PERCIVAL HODSON.

Southgate.—1, Ada-villas, and plot of land adjoining, f., p.	155
2 to 5, Ada-villas, f., w.r. 88*l.* 8s.	760
Wood Green.—9 and 10, Cranbourn-ter., f., y.r. 64*l.* 16s.	565

By LOWE & GOLDSCHMIDT.

Hampstead.—1 to 6, Grove-cottages, and 8, The Mount, area 6,500 ft., e.r. 228*l.* 6s.	2,100

By E. FERGUSSON TAYLOR.

Enfield.—Bycullah-rd., Teignegrace, area 0 a. 2 r. 32 p., f., y.r. 120*l.*	2,050

By TRAFFORD & CARTER.

Camberwell.—8 to 26 (even), Pitman-st., u.t. 62 yrs., g.r. 37*l.*, w.r. 305*l.* 10s.	1,870
Spitalfields.—38 to 46 (even), Dunk-st., with cowshed in rear, y.r. 1[2]2*l.* 14s.; also i.g.r. 13*l.* 5s., u.t. 35 yrs., g.r. 31*l.* 10s.	1,760
Dalston.—70, Norfolk-rd., u.t. 57 yrs., g.r. 6*l.*, e.r. 45*l.*	405
38, Lenthall-rd., u.t. 15½ yrs., g.r. 4*l.* 8s., y.r. 30*l.*	150

By G. A. WILKINSON & SON.

Hackney.—2, Urswick-rd., area 25,826 ft., f., p. Perivale, &c., Middlesex.—Water-la., &c., The Manor Farm, 94 a. 2r. 6 p., f., y.r. 256*l.* 6s. 4d. (in lots)	7,575

Contractions used in these lists.—F.g.r. for freehold ground-rent; l.g.r. for leasehold ground-rent; i.g.r. for improved ground-rent; g.r. for ground-rent; r. for rent; f. for freehold; c. for copyhold; l. for leasehold; p. for possession; e.r. for estimated rental; w.r. for weekly rental; q.r. for quarterly rental; y.r. for yearly rental; u.t. for unexpired term; p.a. for per annum; yrs. for years; la. for lane; st. for street; rd. for road; sq. for square; pl. for place; ter. for terrace; cres. for crescent av. for avenue; gdns. for gardens; yd. for yard; gr. for grove; b.h. for beer-house; p.h. for public-house; o. for offices; s. for shops.

PRICES CURRENT OF MATERIALS.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

	£ s. d.		
Hard Stocks	1 15 0	per 1,000	alongside, in river.
Rough Stocks and Grizzles.....	1 12 0	,,	,, ,,
Facing Stocks....	2 12 0	,,	,, ,,
Shippers	2 5 0	,,	,, ,,
Flettons	1 7 6	,,	at railway depôt
Red Wire Cuts ..	1 12 0	,,	,, ,,
Best Fareham Red	3 12 0	,,	,, ,,
Best Red Pressed Ruabon Facing	5 0 0	,,	,, ,,
Best Blue Pressed Staffordshire ..	4 5 0	,,	,, ,,
Do. Bullnose	4 11 0	,,	,, ,,
Best Stourbridge Fire Bricks	4 8 0	,,	,, ,,

GLAZED BRICKS.

Best White and Ivory Glazed Stretchers.....	13 0 0	,,	,, ,,
Headers	12 0 0	,,	,, ,,
Quoins, Bullnose, and Flats.....	17 0 0	,,	,, ,,
Double Stretchers	19 0 0	,,	,, ,,
Double Headers..	16 0 0	,,	,, ,,
One Side and two Ends.....	19 0 0	,,	,, ,,
Two Sides and one End	20 0 0	,,	,, ,,
Splays, Chamfered, Squints.....	20 0 0	,,	,, ,,
Best Dipped Salt Glazed Stretchers and Headers	12 0 0	,,	,, ,,
Quoins, Bullnose, and Flats.....	14 0 0	,,	,, ,,
Double Stretchers	15 0 0	,,	,, ,,
Double Headers..	14 0 0	,,	,, ,,
One Side and two Ends.....	15 0 0	,,	,, ,,
Two Sides and one End	15 0 0	,,	,, ,,
Splays Chamfered, Squints.....	14 0 0	,,	,, ,,
Second Quality White and Dipped Salt Glazed	2 0 0	,,	less than best.

Thames and Pit Sand	6	9	per yard, delivered.
Thames Ballast	6	0	,, ,,
Best Portland Cement	30	0	per ton, delivered.
Best Ground Blue Lias Lime..	20	6	,, ,,

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime	10s 6d. per yard, delivered.
Stourbridge Fire-clay in sacks	27s. 6d. per ton at rly. dpt.

STONE.

	s. d.		
Ancaster in blocks	1 11	per ft. cube, deld	rly. depôt.
Bath ,, ...	1 7	,,	,,
Farleigh Down Bath ..	1 8	,,	,,
Beer in blocks	1 6	,,	,,
Grinshill ,, ...	1 10	,,	,,
Brown Portland in blocks	2 2	,,	,,
Darley Dale in blocks..	2 4	,,	,,
Red Corsehill ,,	2 5	,,	,,
Closeburn Red Freestone	2 0	,,	,,
Red Mansfield ,,	2 4	,,	,,

PRICES CURRENT (*Continued*).

STONE.

YORK STONE—*Robin Hood Quality.*

	s. d.		
Scappled random blocks	2 10	per ft. cube, deld.	rly. depôt.
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2 3	per foot super.	,,
6 in. Rubbed two sides Ditto, Ditto	2 6	,,	,,
3 in. Sawn two sides slabs (random sizes)..	0 11½	,,	,,
2 in. to 2½ in. Sawn one side slabs (random sizes)	0 7½	,,	,,
1½ in. to 2 in. ditto, ditto	0 6		,,
BEST HARL YORK—			
Scappled random blocks	3 0	per ft. cube	,,
6 in. sawn two sides, landings to sizes (under 40 ft. sup.)	2 8	per ft. super.	,,
6 in. Rubbed two sides Ditto	—	,,	,,
3 in. sawn two sides slabs (random sizes)	1 2	,,	,,
2 in. self-faced random flags.....	0 5	,,	,,
Hopton Wood (Hard Bed)	in blocks	2 3	per ft. cube.
,, ,, ,,	6 in. sawn both sides landings	2 7	per ft. super. deld. rly. depôt.
,, ,, ,,	3 in. do.	1 2½	,, ,,

SLATES.

n. in.	£ s. d.		
20×10 best blue Bangor..	13 2 6	per 1000 of 1200 at ry.dep.	
20×12 ,, ,, ,, ..	13 17 6	,,	,,
20×10 best seconds ,,	12 15 0	,,	,,
20×12 ,, ,, ,,	13 10 0	,,	,,
16× 8 best ,,	7 0 0	,,	,,
20×10 best blue Portmadoc ..	12 5 0	,,	,,
16×8 best blue Portmadoc	6 5 0	,,	,,
20×10 best Eureka unfading green....	15 2 6	,,	,,
20×12 ,, ,,	17 2 6	,,	,,
18×10 ,, ,,	12 10 0	,,	,,
16× 8 ,, ,,	10 5 0	,,	,,
20×10 permanent green	11 0 0	,,	,,
18×10 ,, ,,	9 5 0	,,	,,
16× 8 ,,	6 10 0	,,	,,

TILES.

	s. d.		
Best plain red roofing tiles..	42 0	per 1,000, at	rly. depôt.
Hip and valley tiles....	3 7	per doz.	,, ,,
Best Broseley tiles	50 0	per 1,000	,, ,,
Do. Ornamental Tiles	52 6	,,	,, ,,
Hip and valley tiles....	4 0	per doz.	,, ,,
Best Ruabon Red, brown or brindled Do. (Edwards)	57 6	per 1,000	,, ,,
Do. ornamental Do.	60 0	,,	,, ,,
Hip tiles	4 0	per doz.	,, ,,
Valley tiles.....	3 0	,,	,, ,,
Best Red or Mottled Staffordshire Do. (Peakes)	51 9	per 1,000	,, ,,
Do. Ornamental Do.	54 6	,,	,, ,,
Hip tiles	4 1	per doz.	,, ,,
Valley tiles.....	3 8	,,	,, ,,
Best "Rosemary" brand plain tiles	48 0	per 1,000	,, ,,
Do. Ornamental Do.	50 0	,,	,, ,,
Hip tiles	4 0	per doz.	,, ,,
Valley tiles	3 8	,,	,, ,,

WOOD.

	At per standard. £ s. d.	£ s. d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.....	15 10 0	16 10 0
Deals: best 3 by 9.....	14 10 0	15 10 0
Battens: best 2½ in. by 7 in. and 8 in., and 3 in. by 7 in. and 8 in.....	11 10 0	12 10 0
Battens: best 2½ by 6 and 3 by 6 ..	0 10 0	less than 7 in. and 8 in.
Deals: seconds	1 0 0	less than best
Battens: seconds	0 10 0	,, ,, ,,
2 in. by 4 in. and 2 in. by 6 in. ..	9 0 0	9 10 0
2 in. by 4½ in. and 2 in. by 5 in. ..	8 10 0	9 10 0
Foreign Sawn Boards— 1 in. and 1¼ in. by 7 in.	0 10 0	more than battens.
¾ in.	1 0 0	,,
Fir timber: Best middling Danzig or Memel (average specification	At per load of 50 ft. 4 10 0	5 0 0
Seconds	4 5 0	4 10 0
Small timber (8 in. to 10 in.)	3 12 6	3 15 0
Small timber (6 in. to 8 in.).....	3 0 0	3 10 0
Swedish balks	2 15 0	3 0 0
Pitch-pine timber (30 ft. average)..	3 5 0	3 15 0

JOINERS WOOD.

	At per standard.	
White Sea: First yellow deals, 3 in. by 11 in.....	23 0 0	24 0 0
3 in. by 9 in.	21 0 0	22 10 0
Battens, 2½ in. and 3 in. by 7 in.	17 0 0	18 10 0
Second yellow deals, 3 in. by 11 in.	18 10 0	20 0 0
,, ,, 3 in. by 9 in.	17 10 0	19 0 0
Battens, 2½ in. and 3 in. by 7 in.	13 10 0	14 10 0
Third yellow deals, 3 in. by 11 in. and 9 in.	15 10 0	16 10 0
Battens, 2½ in. and 3 in. by 7 in.	11 10 0	12 10 0
Petersburg: first yellow deals, 3 in. by 11 in.	21 0 0	22 10 0
Do. 3 in. by 9 in.....	18 0 0	19 10 0
Battens.....	13 10 0	15 0 0
Second yellow deals, 3 in. by 11 in.....	16 0 0	17 0 0
Do. 3 in. by 9 in.	14 10 0	16 0 0
Battens.....	11 0 0	12 10 0
Third yellow deals, 3 in. by 11 in.....	13 10 0	14 0 0
Do. 3 in. by 9 in.	13 0 0	14 0 0
Battens	10 0 0	11 0 0

PRICES CURRENT (*Continued*).

WOOD.

	At per standard. £ s. d.	£ s. d.
White Sea and Petersburg:—		
First white deals, 3 in. by 11 in.	14 10 0	15 10 0
,, ,, 3 in. by 9 in.	13 10 0	14 10 0
Battens.....	11 0 0	12 0 0
Second white deals 3 in. by 11 in.	13 10 0	14 10 0
,, ,, ,, 3 in. by 9 in.	12 10 0	13 10 0
,, ,, ,, battens.....	9 10 0	10 10 0
Pitch-pine: deals	16 0 0	18 0 0
Under 2 in. thick extra	0 10 0	1 0 0
Yellow Pine—First, regular sizes ..	33 0 0	upwards.
Oddments	22 0 0	24 0 0
Seconds, regular sizes	24 10 0	26 10 0
Yellow Pine Oddments	20 0 0	22 0 0
Kauri Pine—Planks, per ft. cube..	0 3 6	0 4 6
Danzig and Stettin Oak Logs— Large, per ft. cube	0 2 6	0 3 6
Small ,, ,, ...	0	0 2 6
Wainscot Oak Logs, per ft. cube ..	0 5 0	0 5 6
Dry Wainscot Oak, per ft. sup. as inch	0 0 7	0 0 8
¾ in. do. do.	0 0 6½	- - -
Dry Mahogany— Honduras, Tabasco, per ft. sup. as inch	0 0 9	0 0 11
Selected, Figury, per ft. sup. as inch	0 1 6	0 2 0
Dry Walnut, American, per ft. sup. as inch	0 0 10	0 1 0
Teak, per load	17 0 0	21 0 0
American Whitewood Planks— Per ft. cube	0 4 0	- - -

Prepared Flooring—	Per square.	
1 in. by 7 in. yellow, planed and shot.....	0 13 6	0 17 6
1 in. by 7 in. yellow, planed and matched.....	0 14 0	0 18 0
1¼ in. by 7 in. yellow, planed and matched.....	0 16 0	1 1 6
1 in. by 7 in. white, planed and shot.....	0 11 6	0 13 6
1 in. by 7 in. white, planed and matched.....	0 12 0	0 14 0
1¼ in. by 7 in. white, planed and matched.....	0 14 6	0 16 6
¾ in. by 7 inch yellow matched and beaded or V-jointed boards	0 11 0	0 13 6
1 in. by 7 in. do. do. do.	0 14 0	0 18 0
¾ in. by 7 in. white do. do.	0 10 0	0 11 6
1 in. by 7 in. do. do. do.	0 11 6	0 13 6

6-in. at 6d. to 9d. per square less than 7-in.

JOISTS, GIRDERS, &c.

	In London, or delivered Railway Vans, per ton. £ s. d.	£ s. d.
Rolled Steel Joists, ordinary sections	6 5 0	7 5 0
Compound Girders ,, ,,	8 2 6	9 5 0
Angles, Tees and Channels, ordinary sections	7 17 6	8 17 6
Flitch Plates	8 5 0	8 15 0
Cast Iron Columns and Stanchions, including ordinary patterns	7 2 6	8 5 6

METALS.

	Per ton, in London £ s. d.	£ s. d.
IRON—		
Common Bars.....	7 15 0	8 5 0
Staffordshire Crown Bars, good merchant quality	8 5 0	8 15 0
Staffordshire "Marked Bars" ..	10 10 0	- - -
Mild Steel Bars	9 0 0	9 10 0
Hoop Iron, basis price.....	9 5 0	9 10 0
,, ,, galvanised.....	16 0 0	- - -

(* And upwards, according to size and gauge.)

Sheet Iron, Black.—		
Ordinary sizes to 20 g.	10 0 0	- - -
,, ,, to 24 g.	11 0 0	- - -
,, ,, to 26 g.	12 10 0	- - -
Sheet Iron, Galvanised, flat, ordinary quality—		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.....	12 15 0	- - -
,, ,, 22 g. and 24 g.	13 5 0	- - -
,, ,, 26 g.....	14 5 0	- - -
Sheet Iron, Galvanised, flat, best quality:—		
Ordinary sizes to 20 g.....	16 0 0	- - -
,, ,, 22 g. and 24 g.	16 10 0	- - -
,, ,, 26 g.....	18 0 0	- - -
Galvanised Corrugated Sheets:—		
Ordinary sizes, 6 ft. to 8 ft. 20 g.	12 15 0	- - -
,, ,, 22 g. and 24 g.	13 5 0	- - -
,, ,, 26 g.....	14 5 0	- - -
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. by 20 g. and thicker ..	12 0 0	- - -
,, ,, 22 g. and 24 g.	13 0 0	- - -
,, ,, 26 g.	14 5 0	- - -
Cut nails, 3 in. to 6 in.	9 5 0	9 15 0

(Under 3 in. usual trade extras.)

LEAD, &c.

	Per ton, in London £ s. d.	£ s. d.
LEAD—Sheet, English, 3 lbs. & up.	14 15 0	- - -
Pipe in coils	15 5 0	- - -
Soil pipe	17 15 0	- - -
Compo Pipe	17 15 0	- - -
ZINC—Sheet—		
Vieille Montagne ..... ton	28 5 0	- - -
Silesian	28 0 0	- - -
COPPER—		
Strong Sheet ..... per lb.	0 0 10½	- - -
Thin ..... ,,	0 0 11½	- -
Copper nails ..... ,,	0 0 11	- -
BRASS—		
Strong Sheet..... ,,	0 0 10	- - -
Thin ,, ... ,,	0 0 11	- - -
TIN—English Ingots ..... ,,	0 1 5	- - -
SOLDER—Plumbers' ..... ,,	0 0 6½	- - -
Tinmen's ..... ,,	0 0 8½	- - -
Blowpipe ..... ,,	0 0 9½	- - -

[*See also page 501.*

COMPETITIONS, CONTRACTS AND PUBLIC APPOINTMENTS.

(For some Contracts, &c., still open, but not included in this List, see previous issues.)

COMPETITIONS.

Nature of Work.	By whom Required.	Premiums.	Designs to be delivered.
*Public Library	Poplar Borough Council	75*l.*	June 23

CONTRACTS.

Nature of Work or Materials.	By whom Advertised.	Forms of Tender, &c., supplied by	Tenders to be delivered.
Free Library and Offices	Bideford Corporation	A. J. Dunn, Architect, 85, Colemore-row, Birmingham	May 12
Sewers, &c., Abbey Green	Nuneaton U.D.C.	J. C. Cook, Engineer, Council Offices, Nuneaton	do.
Buildings, Normanton Hill	Handsworth U.D.C.	B. Powell, Civil Engineer, Council Offices, Woodhouse	do.
Sewer, Stoney-lane	Birmingham Corporation	J. Price, City Engineer, Council House, Birmingham	do.
Six Houses, Bargoed	Messrs. Buchan & Co.	T. Edwards, Rhymney Brewery, Bargoed	do.
Stabling, Portwall-lane, Bristol	Great Western Railway Co.	G. K. Mills, Paddington Station, London, W.	do.
Masonic Hall, Arklow, Ireland	.....	S. Stuart, Ferrybank, Arklow	do.
*Wood Paving and Kerbing Works	Willesden District Council	Council's Engineer, Public Offices, Kilburn, N.W.	do.
House, Queenstown, Ireland	.....	W. H. Hill & Sons, Architects, 23, South Mall, Cork	May 13
Additions to the Blast Furnace Inn, Pontlottyn	.....	P. V. Jones, Architect, Hengoed	do.
Steading, &c., Lumphanan, N.B.	.....	G. Cocker, Finzean Aboyne, Aberdeen	do.
Twelve Houses, Alnwick	North Eastern Railway Co.	W. Bell, Architect, Central Station, Newcastle-on-Tyne	do.
Refuse Destructor, St. Paul's-road-yard	Preston Corporation	Borough Surveyor, Town Hall, Preston	do.
Sewerage Works, Cheshire	Neston U.D.C.	Knowles & Russell, Civil Engineers, 5, Castle-street, Liverpool	do.
Surveyors' Materials	Bradford Corporation	J. H. Cox, City Surveyor, Town Hall, Bradford	do.
*New School at Tilbury Docks	Chadwell St. Mary School Board	J. Thompson, 12, St. Vincent's-road, Southend-on-Sea	May 14
Two Lodges, Frankley Reservoir	Birmingham Corporation	J. Mansergh & Sons, Civil Engineer, 5, Victoria-street, S.W.	do.
Brick and Girder Bridge, Evington-road	Leicester Corporation	E. G. Mawbey, Civil Engineer, Town Hall, Leicester	do.
Sewers, &c.	Winslow (Bucks) R.D.C.	W. Wise, Surveyor, High-street, Winslow	do.
Three Houses, Truro	Messrs. Palmer & Cundy	S. Hill, Architect, Redruth	May 15
Wesleyan Church, Dodworth, near Barnsley	.....	G. Moxon, Architect, 26, Church-street, Barnsley	do.
Road Metal, &c., near Derby	Castle Donington R.D.C.	F. E. Burton, High-street, Castle Donington	do.
School, Heanor	.....	A. Marshall, Architect, King-street, Nottingham	May 16
Repairs to Chapel, Bryneglwys (Wales)	.....	The Vicarage, Bryneglwys	do.
Cast-iron Pipes, &c.	Leigh (Lancs) Town Council	J. Gibson, Engineer, Town Hall, Leigh	do.
Additions to Nurses' Home, Beckett-street	Leeds Guardians	T. Winn & Sons, Architects, 92, Albion-street, Leeds	do.
Additions to Schools, Shodfriars	Boston (Lincs) School Board	J. Rowell, Borough Surveyor, Boston	do.
Additions to Cowbridge Arms Hotel	Aberdare Town Council	Smith & Davies, Architects, Aberdare	do.
Alterations to Villas, Nanthir-road	Blaengarw Conservative Club	R. J. Richards, Conservative Club, Port Talbot	do.
Three Houses, Dipton, Durham	.....	G. Nicholson, Chopwell View, Dipton	May 18
Workmen's Dwellings, Walker-road	Newcastle-on-Tyne Corporation	Liddle & Browne, Architects, Mosley-street, Newcastle-on-Tyne	do.
Granite Road Metal	Stevenage (Herts) U.D.C.	W. O. Times, Council Offices, Stevenage	do.
Police Station, Royton	Lancs County Council	H. Littler, Architect, County Offices, Preston	do.
Additions to Infirmary, Dudley-road	Birmingham Guardians	W. H. Ward, Architect, Paradise-street, Birmingham	do.
*Additions, &c., to Hospital	Warwick Joint Hospital Board	F. P. Trepess, Architect, 1, Church-street, Warwick	do.
2,118 ft. of 12-in. Storm Water Sewer, &c.	Bromley U.D.C.	Council's Surveyor, District Council Offices, Bromley, Kent	May 19
*Asphalt Paving Works	Corporation of London	Engineer to Corporation, Guildhall, E.C.	do.
*Wood Paving Works	do.	do.	do.
Chapel, Holton-road, Barry Dock, Cardiff	Rev. J. S. Longdon	G. S. Halliday, Architect, Cardiff	do.
*Foundations of New Parcel Office, Union-street, S.E.	Commissioners of H.M. Works, &c.	J. Wager, H.M. Office of Works, Storey's Gate, S.W.	do.
*Making-up Roads	Acton District Council	Council's Surveyor, 242, High-street, Acton	do.
*Restoration of Church	St. Chad's Ch., Seighford, Committ.	The Vicarage, Seighford, Stafford	May 20
*Sewering, Levelling, Paving, &c.	Borough of Kingston	Borough Surveyor, Clattern House, Kingston-on-Thames	do.
*Erection of a Public Library	Woolwich Borough Council	Borough Engineer, Maxey-road, Plumstead	May 21
*External Painting at Ashford Schools	Mgrs. West London School District	Clerk to the Managers, West London District Schools, Ashford, Mdlx.	do.
Road Works Little Roke-avenue, Coulsdon	Croydon R.D.C.	R. M. Chart, Surveyor, Town Hall, Croydon	do.
*Alteration to Town Hall	M.B. of St. Marylebone	Engineer to the Council, Town Hall, Marylebone-lane, W.	May 22
*Sewers, Drainage, Road Making Works, Fencing, &c.	.....	W. B. Hill, 81, Above Bar, Southampton	May 23
*Newspaper Repository at Hendon	H.M. Works	J. B. Westcott, H.M. Office of Works, Storey's Gate, S.W.	May 25
*Superstructure of New Pavilion, Shelter, &c.	Ramsgate Corporation	S. D. Adshead, Architect, 46, Great Russell-street, W.C.	do.
*Erection of Post Office, Knightsbridge	Commissioners of H.M. Works, &c.	H.M. Office of Works, Storey's Gate, S.W.	May 26
*Making-up Streets	West Ham Borough Council	Borough Engineer, Town Hall, West Ham, E.	do.
*Sewerage and Sewage Disposal Works, Formby	West Lancashire R.D.C.	C. A. Atkinson, Engineer, 11, Tithebarn-street, Liverpool	June 2
*Painting, &c., Works at Infirmary	Paddington Guardians	E. H. Sim, Architect, 8, Craig's-court, W.C.	do.
*Superstructure, &c., of New Lunatic Asylum	Cardiff Corporation	Oatley & Skinner, Architects, Baldwin-street, Bristol	June 24
Four Shops and Houses, North-st., & Lady-lane, Leeds	.....	R. Horsfall & Son, Architect, 22A, Commercial-street, Halifax	No date.
Chapel and School, Armley, Leeds	.....	Howdill & Howdill, Architects, 7, Oxford-row, Leeds	do.
Two Houses and Shops, off Dewsbury-road, Leeds	.....	E. Hill, Architects, 13, Oxford-row, Leeds	do.
Schools, Heanor, Derbyshire	.....	A. Marshall, Architect, King-street, Nottingham	do.
Additions to Chapel, Horsforth, near Leeds	.....	F. Musto, Architect, Greek-street Chambers, Leeds	do.
Alterations to Mission Hall, Lister Hill, Leeds	.....	do.	do.
Drainage Works at Schools, Fortune's Well, Portland	.....	E. Mitchell, 31, Mallams, Portland	do.
Stabling and Six Cottages, Nedham-st., Leicester	.....	J. Wigg, Architect, 5, St. Martin's East, Leicester	do.
Church, Whittaker-lane, Prestwich, Lancs	.....	F. P. Oakley, Architect, Cross-street, Manchester	do.
Four Houses, Wigton-road, Carlisle	.....	Johnstone Bros., Architects, 39, Lowther-street, Carlisle	do.
Factory, Caldewgate, Carlisle	Messrs. Carr & Co., Ltd.	do.	do.
Four Houses, Chapeltown, Sheffield	.....	W. J. Taylor, Architect, Bank-street, Sheffield	do.
Schools, Whitchurch, Hants	Rev. J. W. Harbord	W. Mawer, Whitchurch, Hants	do.
Water Supply Works, Garlands Asylum	Carlisle Lunacy Committee	G. Dale Oliver, County Architect, Carlisle	do.
House, Sutton, Yorks.	.....	J. Haggas & Sons, Architects, 71, North-street, Keighley	do.
Annexe to Victoria and Albert Hotel, Torquay	The Directors	E. Appleton & Sons, Architects, 10, Abbey-road, Torquay	do.
Two pairs of Houses, Upton, near Birkenhead	Mr. T. Houghton	E. W. Johnson, Architect, Lord-street, Southport	do.
School, near Sheffield	Handsworth School Board	Heimsoll & Paterson, Architects, 18, Norfolk-row, Sheffield	do.
*Erection of Steel Foundry, West Drayton	.....	Tapp & Jones, 1, Prince's-street, Westminster, S.W.	do.

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Advertised.	Salary.	Application to be in
*Second Clerk of Works	Coalville U.D.C.	Not stated	May 12
*Clerk of Works	Ilford School Board	3*l.* 3s. per week	May 14
*Engineer and Surveyor	Dartford U.D.C.	250*l.*	May 18
*Manual Instructors	School Board for London	155*l.*	May 19
*Assistant Manual Instructors	do.	100*l.*	do.
*Two Assistant Engineers	Colombo Municipal Council	F. A. Cooper, C.M.G., Director of Public Works, Ceylon	June 1
*Assistant Examiners in Patent Office	Civil Service Commissioners	Not stated	July 2

Those marked with an asterisk (*) are advertised in this Number. *Competition,* iv. *Contracts,* iv. vi. viii. x. & xx. *Public Appointments,* xvii. & xx.

PRICES CURRENT (*Continued*).

ENGLISH SHEET GLASS IN CRATES.

15 oz. thirds	2½d. per ft. delivered.
" fourths	1¾d. " "
21 oz. thirds	3¼d. " "
" fourths	2½d. " "
26 oz. thirds	4d. " "
" fourths	3¼d. " "
32 oz. thirds	5d. " "
" fourths	4¼d. " "
Fluted sheet, 15 oz.	3d. " "
" 21 oz.	4d. " "
⅛ Hartley's Rolled Plate	1¾d. " "
¼ " " "	2d. " "
½ " " "	2½d. " "

OILS, &c.		£	s.	d.
Raw Linseed Oil in pipes or barrels	per gallon	0	2	3
" " " in drums	"	0	2	7
Boiled " " in pipes or barrels	"	0	2	5
" " " in drums	"	0	2	9
Turpentine, in barrels	"	0	3	8
" in drums	"	0	3	10
Genuine Ground English White Lead	per ton	21	10	0
Red Lead, Dry	"	20	0	0
Best Linseed Oil Putty	per cwt.	0	8	0
Stockholm Tar	per barrel	1	12	0

VARNISHES, &c.	Per gallon. £	s.	d.
Fine Pale Oak Varnish	0	8	0
Pale Copal Oak	0	10	6
Superfine Pale Elastic Oak	0	12	6
Fine Extra Hard Church Oak	0	10	0
Superfine Hard-drying Oak, for Seats of Churches	0	14	0
Fine Elastic Carriage	0	12	6
Superfine Pale Elastic Carriage	0	16	0
Fine Pale Maple	0	16	0
Finest Pale Durable Copal	0	18	0
Extra Pale French Oil	1	1	0
Eggshell Flatting Varnish	0	18	0
White Copal Enamel	1	4	0
Extra Pale Paper	0	12	0
Best Japan Gold Size	0	10	6
Best Black Japan	0	16	0
Oak and Mahogany Stain	0	9	0
Brunswick Black	0	8	6
Berlin Black	0	16	0
Knotting	0	10	0
French and Brush Polish	0	10	0

TO CORRESPONDENTS.

F. C. S.—J. S. M.—H. C. (Amounts should have been stated).—"Subscribers to your Journal." (The letter signed thus, whatever its contents, has not been read. The Editor always looks at the signature of a letter *before* reading it; and if anonymous, it is torn up. If the writers have anything to say, let them sign their names to it and it will be read and attended to—not otherwise).

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We are compelled to decline pointing out books and giving addresses.

Any commission to a contributor to write an article is given subject to the approval of the article, when written, by the Editor, who retains the right to reject it if unsatisfactory. The receipt by the author of a proof of an article in type does not necessarily imply its acceptance.

All communications regarding literary and artistic matters should be addressed to THE EDITOR; those relating to advertisements and other exclusively business matters should be addressed to THE PUBLISHER, and *not* to the Editor.

TENDERS.

[Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than 10 a.m. on Thursdays.* N.B.—We cannot publish Tenders unless authenticated either by the architect or the building-owner; and we cannot publish announcements of Tenders accepted unless the amount of the Tender is given, nor any list in which the lowest Tender is under £100, unless in some exceptional cases and for special reasons.]

* Denotes *accepted.* † Denotes *provisionally accepted.*

ABERBEEG (Wales).—For the erection of twenty cottages for the Building Club. Mr. G. C. Hillard, architect, Market Chambers, Abertillery:—

David Lewis	£4,500	D. Powell, Abertillery*	£3,680
C. Sara	3,710		

ASHFORD (Middlesex).—For the erection of a detached villa at Ford Bridge-road, for Mr. Miles, of Ashford. Mr. T. F. Shaw, architect and surveyor, Harlesden, Willesden:—

Augur	£795	Robinson & Co., Holloway*	£685
Lodge	740		
Bye	672		

BARRY (Glamorganshire).—For the erection of a new branch reading-room at Porthkerry-road, Barry, Glam., for the Urban District Council. Messrs. Speir & Beavan, architects, Weston-super-Mare:—

A. Richards	£1,290	A. Hooper	£1,145
H. S. Rendall	1,208	Gibby & Cleak	1,140
Wooton & Son	1,160	S. Martyn*	1,035
H. Fisher	1,150		

[All of Barry.]

BEXHILL.—For 1,100 tons granite macadam and 800 tons Mendip limestone, quartzite, or other approved macadam. Mr. G. Ball, C.E., Town Hall, Bexhill:—

	1,100 Tons Granite. s.	d.	800 Tons other Macadam. s.	d.
Vernon Parker	15	0	15	0
W. Hudson	14	2	11	8
Do.	13	6 (flints)	7	0
Welsh Granite Co.	13	6	13	6
R. W. H. Hamblyn	—		14	3
Quartzite Co.	13	5	—	
Henry L. Cooper	—		11	3
Lyon & Co.	—		14	6
W. Wilson	15	0	—	
L. Sommerfeld	12	9	11	3
Road Maintenance Co., Gravesend*	12	0	12	0
Hughes & Co.	13	0	13	0
Runnals & Sons	13	0	—	
Chittenden & Simmons	—		11	0
Mendip Granite Co., Ltd.	12	9	—	
Whitwick Granite Co.	15	0	—	
Paramor & Sons	12	4	12	6
Wainwright & Co.	14	9	11	6

BRIGHTON.—For painting interior of quarantine block, Brighton Workhouse. Mr. H. S. Reed, Surveyor, Parochial Offices, Prince's-street, Brighton:—

Brown & Sons	£325 0	Gates & Sons	£265 0
J. Dutton	319 12	J. Olliver, Brighton*	200 0
E. C. Holland	315 0		

CARDIFF.—For the erection of a church, Radyr (first section), for the Rev. D. Phillips, M.A. Mr. G. E. Halliday, architect, Cardiff. Quantities by Mr. J. W. Rodger, 14, High-street, Cardiff:—

Lattey & Co.	£2,602 12 0	Beames & Nephew	£1,922 0 0
W. Cox	2,365 15 2	Knox & Wells	1,879 0 0
C. C. Dunn	2,132 0 0	A. W. Cadwallader, Roath Park.	
Couzens & Co.	2,045 10 0	Cardiff*	1,685 0 0
Williams & Hoare	1,979 0 0		

CHICHESTER.—For the erection of a rectory at Selsey, for the Rev. J. Caris-Brown, M.A. Mr. Philip A. Robson, architect, Westminster. Quantities by Messrs. J. Leaning & Sons, John-street, Bedford-row, W.C.:—
J. Garrett & Sons, Balham Hill, S.W.* .. £2,525

COLWYN BAY.—For new promenades and foreshore improvement works for the Urban District Council. Mr. Wm. Jones, Engineer and Surveyor to the Council:—

	Promenade No. 1. £	Promenade No. 2. £	Promenade No. 3. £	Total. £
J. & M. Patrick	35,934	15,572	18,304	69,810
Dent & Sons	—	—	17,310	17,310
Bower Bros.	32,545	11,218	14,303	58,067
W. Kennedy	29,868	12,226	15,172	57,266
E. Nuttall	27,365	11,025	14,042	52,434
Turner, Heason, & Mitchell	30,130	9,339	11,028	50,497
J. & J. Binns	22,707	8,866	11,105	42,679
J. Moffatt	22,637	8,130	10,803	41,571
L. Roberts	26,454	7,135	10,806	41,407
McKee & McNally	21,653	7,599	10,795	41,048
Brebner & Co.	22,227	6,798	10,343	39,368
Pethick Bros.	21,89[illegible]	7,419	9,322	38,640
J. Strachan	20,505	7,431	9,646	37,583
E. R. Lester	20,503	7,396	9,240	37,149
Nowell & Sons	20,560	6,912	9,275	36,748
Jones & Sons	20,176	6,578	8,505	35,259
Public Works Co.	19,056	7,420	8,695	35,177
G. Law	20,126	7,188	8,685	35,999
Underwood & Bros., Dukinfield	18,757*	6,691*	8,903*	34,351*
R. Finnegan	18,589	6,520	9,044	34,154
J. L. Dawson	19,[illegible]99	5,749	8,865	34,013
G. Bell	16,803	6,585	8,689	32,077
Dixon & Co.	17,224	5,615	7,429	30,268
Johnson & Langley‡	—	—	—	30,049
Engineer's estimate	20,000	8,500	8,554	36,054

‡ Not complied with conditions.

CONVOY (co. Donegal).—For erection and completing Presbyterian church, for Building Committee. Mr. John M'Intyre, architect, Letterkenny. Quantities not supplied:—

S. Donnell	£1,695 0	S. Woods, Ballybofey, co. Donegal*	£1,264 10
D. McCaffrey	1,435 0		
J. M. Clay	1,412 7		

CORSHAM (Wilts).—For the erection of new Wesleyan church and heating chamber. Plans and quantities by Mr. W. H. Bromley, surveyor, Corsham:—

J. Smith	£1,911 0 0	E. Linzey	£1,577 16 6
J. Carter	1,865 0 0	G. Moore, Trowbridge*	1,304 9 0
Muritt & Son	1,805 0 0		
Bigwood & Co.	1,605 0 0		

For Heating Apparatus.

Haden & Sons, Trowbridge £33 15 0

DUDLEY.—For new shopping, alterations, &c., King-street, Dudley, for Messrs. Poole & Lovell. Mr. A. Ramsell, architect and surveyor. Dudley:—

Webb Bros.	£497 0	M. Round, Dudley*	£459 10
E. Seckerson	487 0	Oakley & Coulson	446 0
J. Edwards	479 10		

EBBW VALE (Wales).—For the erection of schoolroom, &c., at rear of chapel, James-street. Mr. R. L. Roberts, architect, Abercarn. Quantities by architect:—

T. S. Foster	£1,185 0	Davies & Son	£912 0
J. Morgan	1,012 0	Williams & Rogers, Cwm*	885 0
Richards & Co., Ltd.	995 0	Gaen Bros.	877 9
Smith Bros.	970 0	Marsh & Sons	875 0
J. Newcombe	950 0		

HAMPTON (Middlesex).—For the erection of isolation hospital, Uxbridge-road, Hampton Hill, for the Urban District Council. Mr. S. H. Chambers, sen., Public Offices, Hampton:—

Joseph Casse	4,424	E. Chamberlain, Addlestone, Surrey*	£3,386
Spiers & Sons	3,700		
Barker & Co., Ltd.	3,389		

KENDAL.—For the erection of a paper mill, Burne side, Kendal, for Messrs. Cropper & Co., Ltd. Mr. John Hutton, architect, Kendal. Quantities by architect:—

Walling and Masonry.—J. Braithwaite, Windermere
Joinery.—Nelson Bros., Kendal
Plastering.—Woodburn & Storey, Kendal
Plumbing.—Airey & Co., Kendal
Painting and Glazing.—Lyon & Son, Kendal
Columns and Girders.—H. Rishton, Kendal
Steel Principals.—Taylor & Co., Manchester
} £5,100

LITTLEHAMPTON.—For additions to town offices, Beach-road, for the Urban District Council. Mr. H. Howard, Surveyor, Town Offices, Littlehampton:—

Linfield & Son	£265
W. Wallis, Littlehampton*	259

LLANELLY.—For the erection of a chapel near Derwydd-road, for "Milo" Congregational Church. Mr. D. L. Jones, architect, 12, West End, Llanelly:—

Howell & Son	£1,700
T. & J. Brown, Llanelly*	1,697
J. Llewellyn	1,649
D. Evans	1,635
Architect's estimate	1,680

LONDON.—For the pulling down and rebuilding of No. 19, Lodge-lane, North Finchley, for Mr. J. B. Oliver. Mr. Geo. Wilby, architect, Orchard Lodge, North Finchley, N.:—

Shewry	£865	Goodchild & Co., Radlett*	£645
Voller & Goodfellow	776		
Peake	711		

LONDON.—For a street station in Bartholomew-close, Aldersgate-street, for the Fire Brigade Committee of the London County Council:—

J. McManus	£275	Humphreys, Ltd.	£217
W. Harbrow	230	Barrett & Power	194
R. S. Buckeridge	229	F. & F. J. Wood*	193

LONDON.—Eleven overhead travelling hand-cranes for use in the New Cross and Camberwell electrical substation, and in the workshops and car sheds at Clapham, New Cross, and Camberwell, for the London County Council:—

Tangyes, Ltd.	£4,440 0
Higginbottom & Co., Ltd.	3,792 0
Isles, Ltd.	3,787 0
Spencer & Co.	3,360 0
Mid-British Co.	2,787 10
Pickerings, Ltd.	2,711 2
Booth & Bros., Ltd.	2,605 0
Carrick & Sons, Ltd.	2,599 0
Higginbottom & Mannock, Ltd.	2,547 10
C. & A. Musker (1901), Ltd.	2,495 0
Bedford Engineering Co.	2,485 0
Bennett & Co.	2,446 8
Baxendale Bros.	2,401 0
Marshall, Fleming, & Jack	2,330 0
John Smith (Keighley), Ltd.	2,292 0
Henderson & Co.	2,201 0
Flavell & Churchill	2,176 0
Jessop & Appleby Bros.	2,130 0
McKinnon & Co.	2,087 0
Bird & Co.	1,998 0
Hitchen & Son	1,810 0
Carrick & Ritchie, Edinburgh*	1,700 0
Morris & Bastert, Ltd.	1,668 0
Paul Hengeau (Le Titan Anversois, Ltd.	1,634 0
Morris & Bastert, Ltd.	1,560 0

LONDON.—For the execution of sewerage works, &c., Clarendon-gardens, for the Paddington Borough Council. Mr. E. B. Newton, C.E., Town Hall, Paddington, W.:—

Porchester-terrace and Bishop's-road Sewerage Works.

Neave & Son, Banister-road, Kensal Rise .. £443

147, Clarendon-gardens' Combined Drainage.

C. P. Roberts, 138, St. Paul's-road, Highbury £415

LONDON.—For the erection of a chapel, vestry, classrooms, and sundry works at St. Gabriel's College, Camberwell, S.E., for the Right Rev. the Bishop of Rochester and the Executive Committee. Mr. Philip A. Robson, architect, 9, Bridge-street, Westminster. Quantities by Messrs. J. Leaning & Sons, John-street, Bedford-row, W.C.:—
J. Garrett & Sons, Balham Hill, S.W.* .. £5,105

LOWER GORNAL (near Dudley).—For extensions to Robert-street Infants' School, Lower Gornal, for the Sedgley School Board. Mr. A. Ramsell, architect, Dudley:—

J. Herbert	£1,586 0 0	E. Seckerson	£1,376 0 0
Hilton & Caswell	1,495 0 0	Guest & Sons	1,350 0 0
J. A. Meredith	1,457 0 0	J. Dallow	1,335 0 0
Speke & Son	1,443 12 6	Oakley & Coulson, Dudley*	1,299 0 0
Gough & Son	1,420 0 0		
C. Griffiths	1,400 0 0		
Jakeman & Round	1,386 0 0		

[*See also next page.*

LOWER GORNAL (near Dudley).—For alterations and extensions to Red Hall Schools, Lower Gornal, for the Sedgley School Board. Mr. A. Ramsell, architect, Dudley.—

J. A. Meredith	£5,799	James Herbert	£5,630
Speke & Son	5 770	John Dallow	5,490
C. Griffiths	5,746	Oakley & Coulson	5,116
Hilton & Caswell	5,710	Gough & Son, Wolverhampton*	4,900
M. Round	5,690		
F. L. Jones	5,640		

LOWESTOFT.—For the erection of Lorne Park-road, W., School Chapel, Kirkley. Mr. G. E. Smith, architect, 145, Victoria-road North, Southsea:—

General Builders, Ld.	£3,468 0 0	R. C. Loder	£2,911 0 0
F. M. Ashly	3,293 0 0	C. R. Cole	2,878 0 0
G. Riches	3,250 0 0	G. Elsey	2,750 0 0
H. C. Lofts	3,037 11 1	Bedwell & Parker	2,660 10 0
C. E. Earl	3,033 0 0	Brady & Son	2,649 9 6
Granding & Sewell	3,016 17 5	J. Gane	2,633 6 0
T. W. Brady	2,997 15 0	J. J. Howes	2,557 0 0
G. E. Hawes	2,900 0 0	Smith & Wolfe £2,345 10 8. Reduced and accepted at	2,000 0 0
Seago & Crisp	2,947 16 4½		

MAESTEG (Wales).—For the execution of sewerage works (six contracts), for the Urban District Council. Mr. J. Humphreys, C.E., Town Hall Chambers, Maesteg. Quantities by Engineer:—

McKee & McNally	£30,494	Brebner & Co.	£25,027
J. E. Evans	29,623	Barnes & Chaplin	24,929
J. O. Brien	29,237	J. Riley	24,390
Mark Thompson	28,170	G. Ruther	22,073
Braithwaite & Co.	28,147	E. H. Page	21,657
A. G. Collins	25,380	H. Hill, Reading*	19,023

[Work tendered for on a schedule of prices.]

MORTLAKE (Surrey).—For erecting twelve houses. Mr. William H. Burt, architect, 10, Bush-lane, Cannon-street, E.C. Quantities by Mr. Thomas Brown, 4 and 5, Warwick-court, Gray's-Inn, W.C.:—

Houghton & Co.	£9,052 6	J. A. Stayner	£7,105 19
Adamson & Sons	9,035 0	Pickering & Besant	6,814 0
Edgar Seaber	7,696 10		
Edwin Spicer	7,317 17		

MORTLAKE (Surrey).—For erecting three houses. Mr. William H. Burt, architect, 10, Bush-lane, Cannon-street, E.C.:—

J. A. Stayner* £1,950

MORTLAKE (Surrey).—For erecting three houses. Mr. William H. Burt, architect, 10, Bush-lane, Cannon-street, E.C.:—

J. A. Stayner* £1,470

NORTHWOOD.—For drainage of New-road, Northwood, Herts. Mr. Ernest H. L. Lailey, surveyor, Watford:—

Tree & Sons	£464 3 8	Brown, Watford*	£350 0 0
Ported	419 0 0	Champniss	331 14 0

NORWICH.—For the erection of a farmhouse, Bergh Apton, for Miss Chapman's Trustees. Mr. A. J. Chambers, architect, St. Giles's-plain, Norwich. Quantities by the architect:—

Haydon & Daniels	£590 0	Morris	£490 0
Lincoln & Bush	548 0	Chaston & Grimson	482 0
Redgrave	516 0	Body & Son	465 0
Hipperson	510 0	Dowe	460 0
Greengrass	493 0	Plumb, Norwich*	456 10

QUARRY BANK (near Brierley Hill).—For new Primitive Methodist Church, Quarry Bank, for the Trustees. Mr. A. Ramsell, architect, Dudley:—

Jakeman & Round	£2,916	2	6
J. A. Meredith	2,894	0	0
M. Round	2,880	0	0
Oakley & Coulson	2,878	0	0
C. A. Horton	2,810	0	0
Guest & Son	2,795	0	0
Brooks & Tandy, Quarry Bank*	2,755	0	0
J. Dallow	2,750	0	0

SEDGLEY (near Dudley).—For paving, &c., to playgrounds, Queen Victoria Schools, Sedgley, for the Sedgley School Board. Mr. A. Ramsell, architect, Dudley. Quantities by the architect:—

Oakley & Coulson	£674 0	Gough & Son, Wolverhampton*	£620 0
Hilton & Caswell	657 10		
Mark Round	635 0		

SHREWSBURY.—For the erection of nurses' home, &c., at the workhouse, Cross Houses, for the Guardians of Atcham Union. Mr. A. B. Deakin, architect, Pride-hill, Shrewsbury:—

	For Escape Stairs, &c.	For Nurses' Home.	Total.
	£	£ s. d.	£
T. Pace	930	698 0 0	1,628
H. Price	955	623 0 0	1,578
G. Bullock	855	627 0 0	1,482
Morris & Sons	885	573 0 0	1,458
Gethin & Co.	845	595 0 0	1,440
Treasure & Son	834	606 0 0	1,440
G. H. Bickerton*	815	610 0 0	1,425
A. G. Roberts		692 12 0	
W. Harris		679 15 0	

[All of Shrewsbury.]

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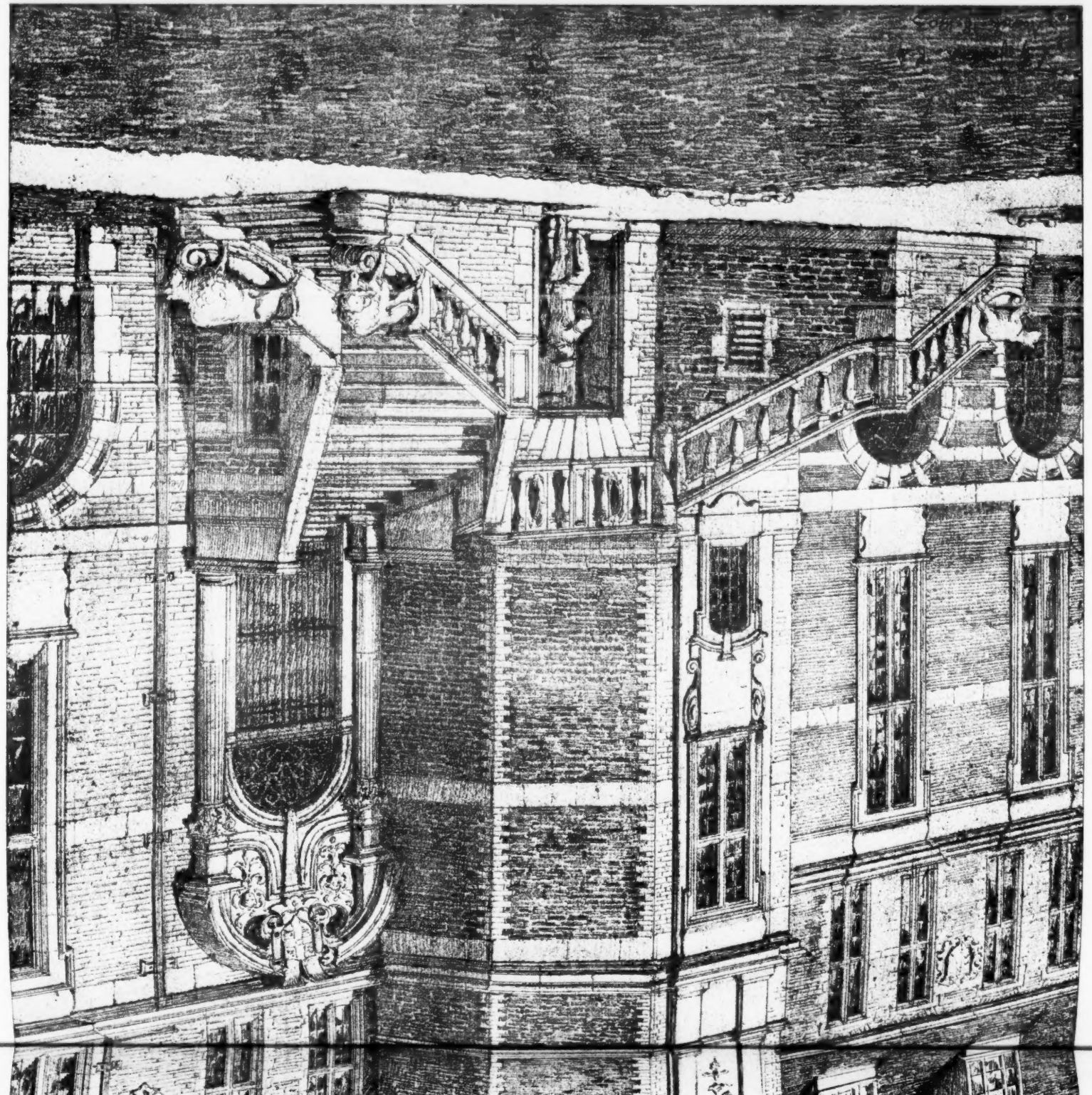

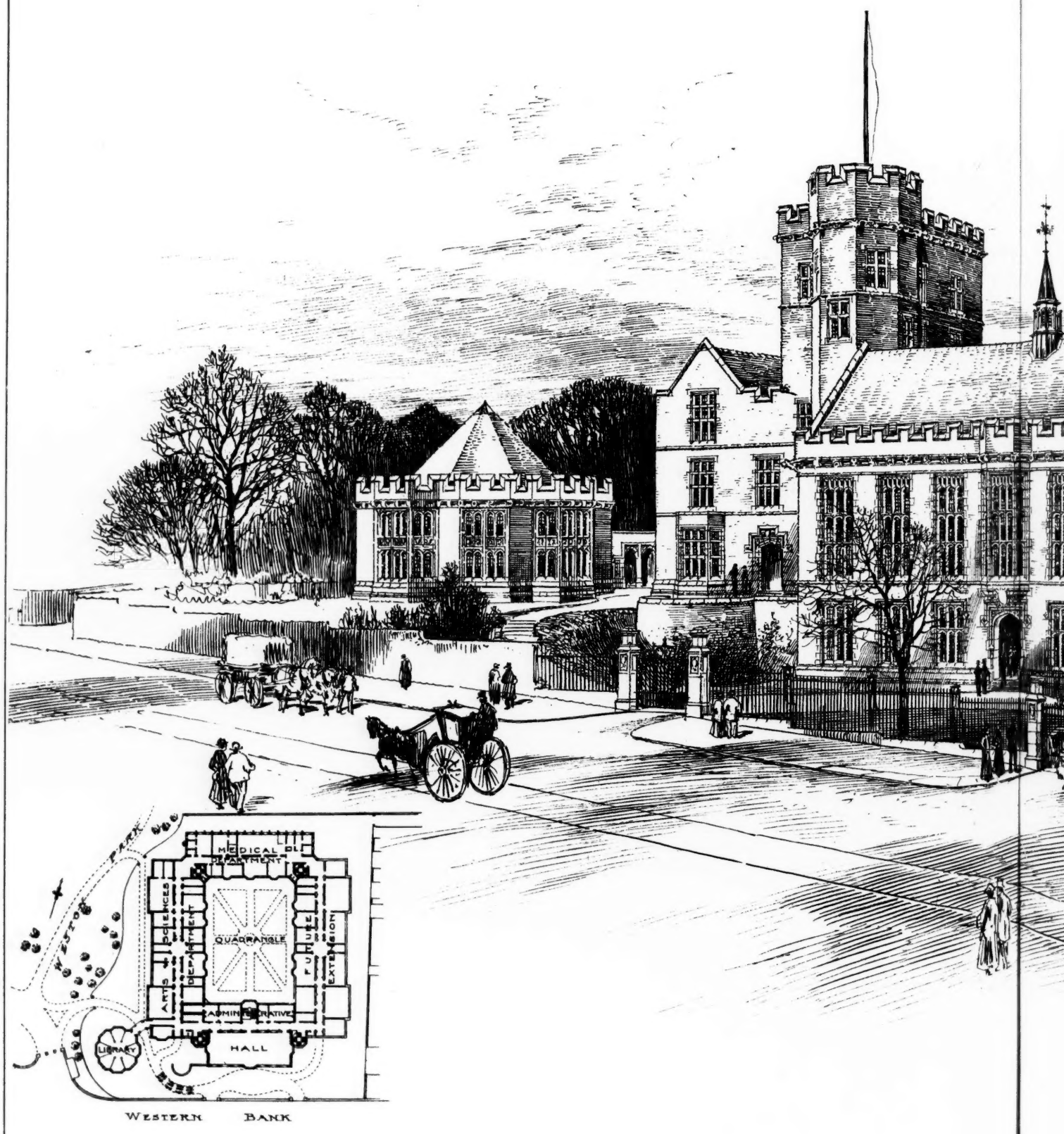

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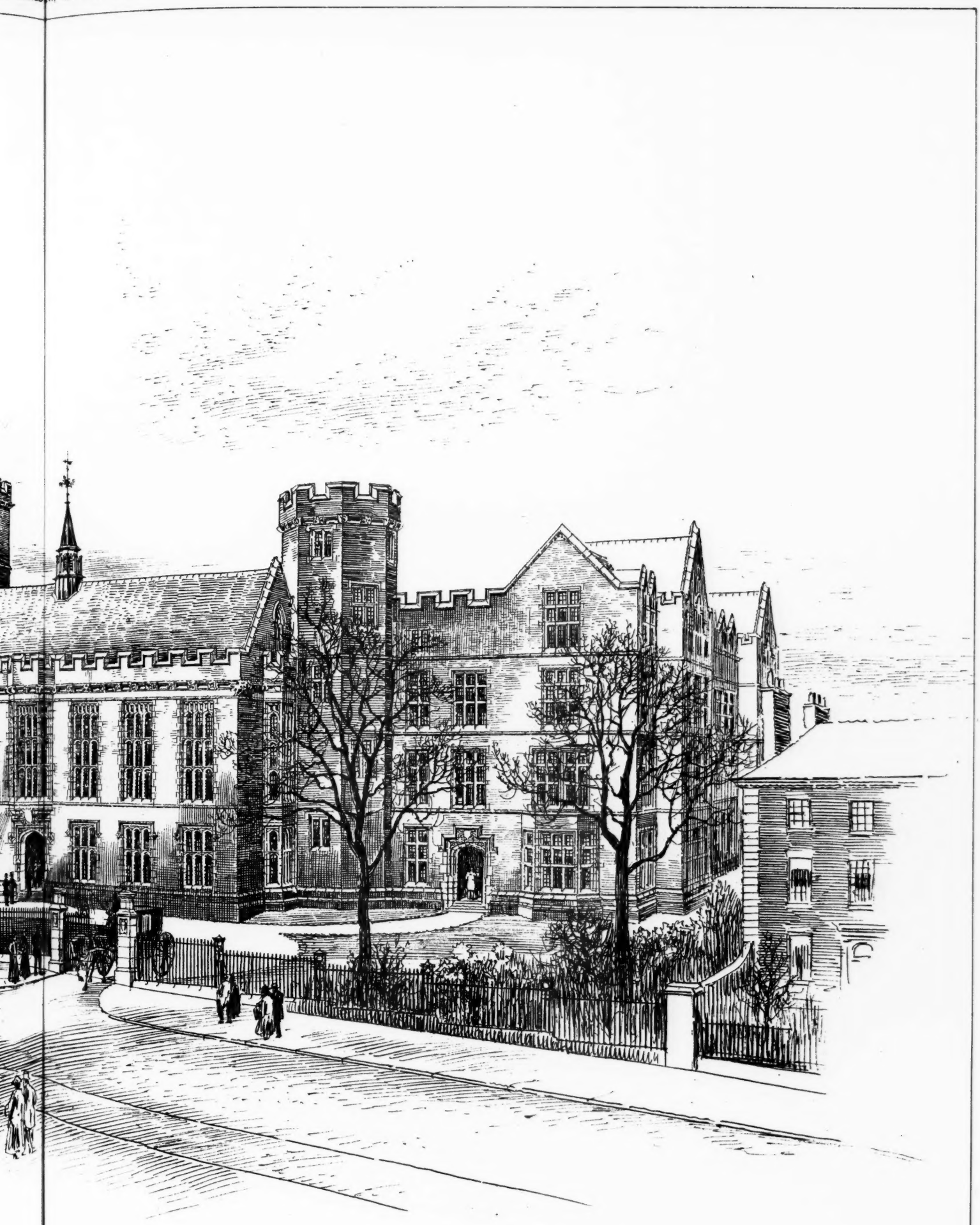

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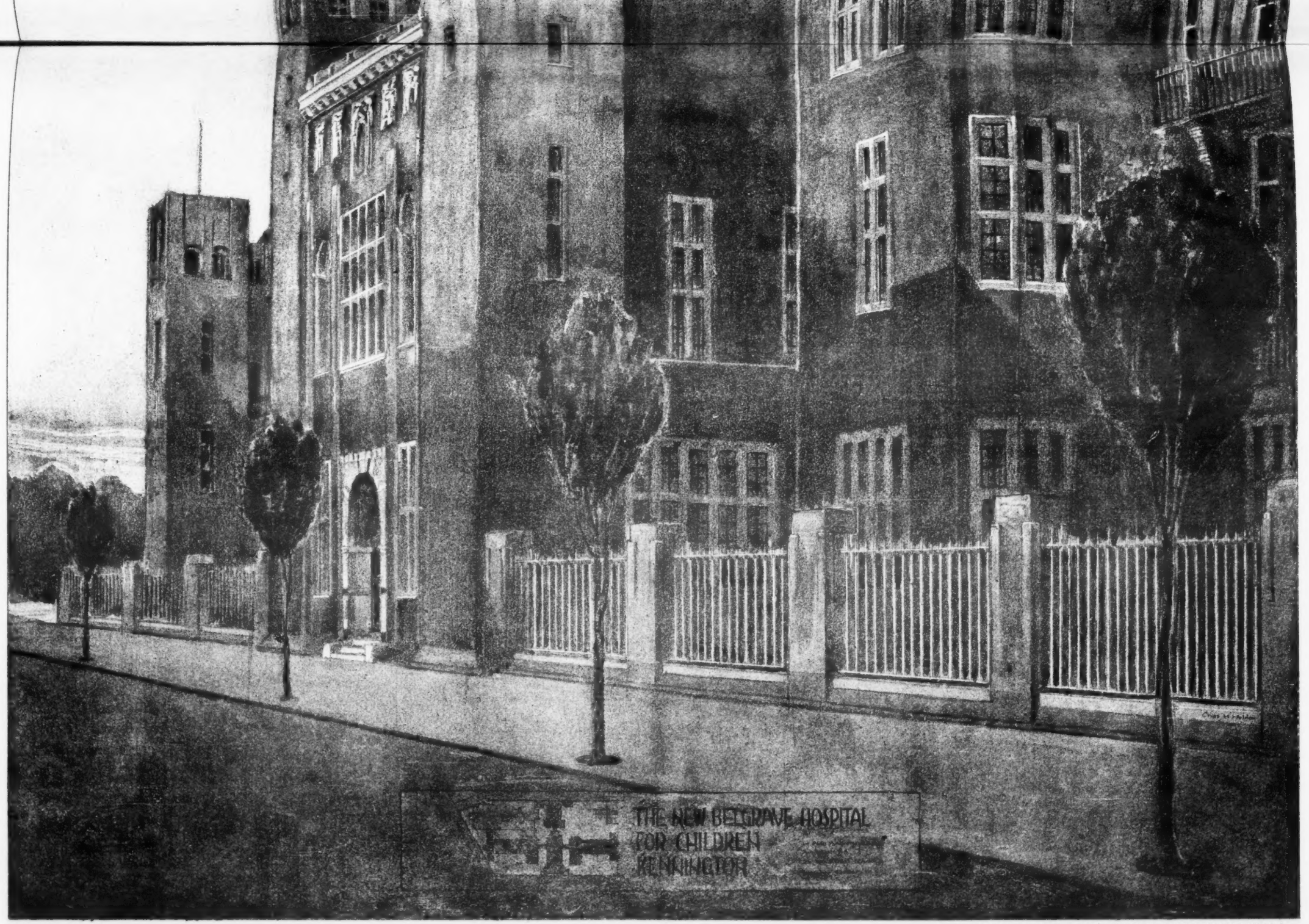

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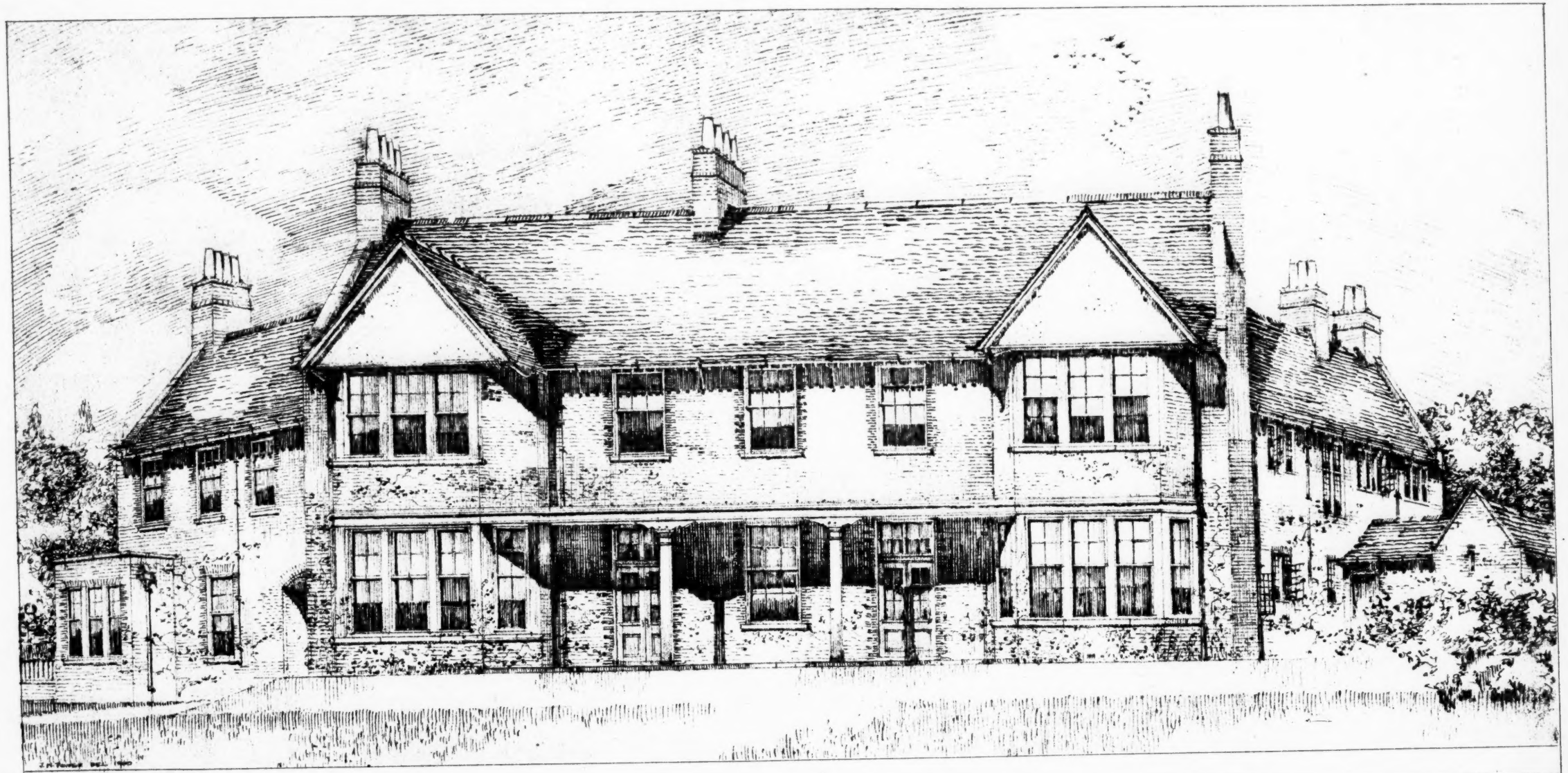
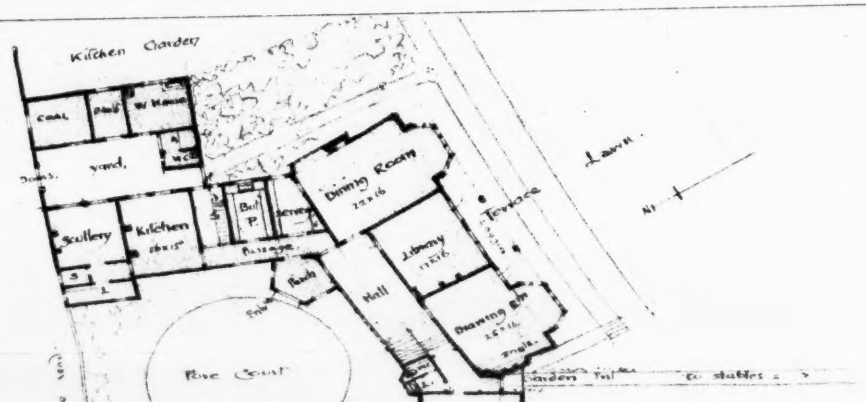
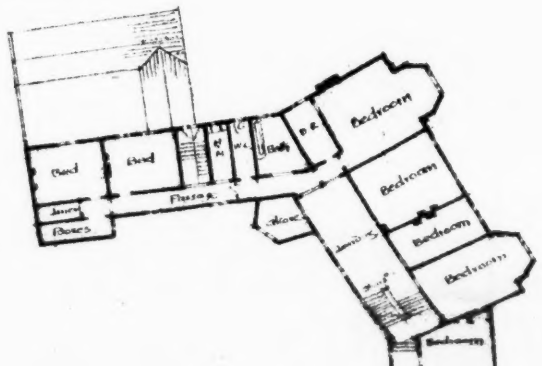
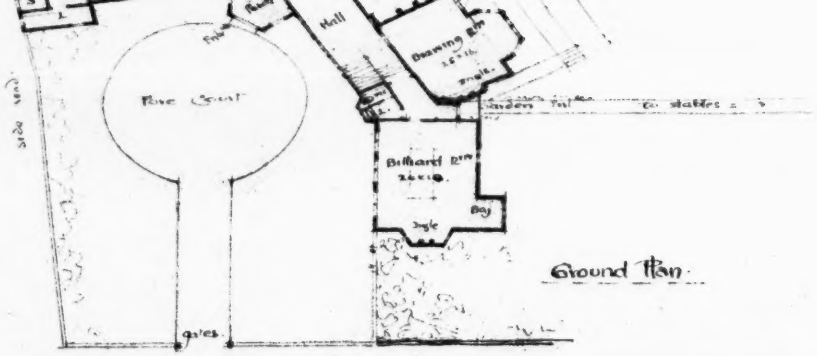
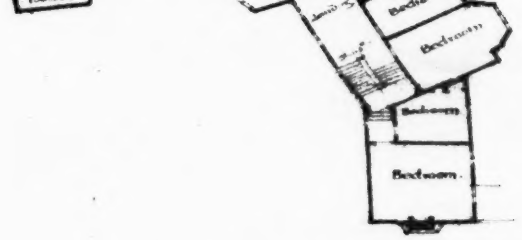



Kitchen Garden
Coals
Dairy
W. Room
yard.
Scullery
Kitchen
Pass.
Bath
Dining Room
Library
Hall
Drawing Rm
Terrace
Lawn
N
Rose Court
Garden
to stables


Bed
Bed
Pass.
Bedroom
Bedroom
Bedroom





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